JVC®

SERVICE MANUAL

HD CAMERA RECORDER

GY-HD100U/GY-HD100E
GY-HD101E

GY-HD101E is added only the DV input function to GY-HD100E.

Mini DV

HDV

Note

- **Lead free solder used in the board (material : Sn, Ag, In, Bi, melting point : 227 Centigrade)**

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Important Safety Precautions

Prior to shipment from the factory, JVC products are strictly inspected to conform with the recognized product safety and electrical codes of the countries in which they are to be sold. However, in order to maintain such compliance, it is equally important to implement the following precautions when a set is being serviced.

●Precautions during Servicing

1. Locations requiring special caution are denoted by labels and inscriptions on the cabinet, chassis and certain parts of the product. When performing service, be sure to read and comply with these and other cautionary notices appearing in the operation and service manuals.

2. Parts identified by the ⚠ symbol and shaded (▨) parts are critical for safety.
   Replace only with specified part numbers.
   Note: Parts in this category also include those specified to comply with X-ray emission standards for products using cathode ray tubes and those specified for compliance with various regulations regarding spurious radiation emission.

3. Fuse replacement caution notice.
   Caution for continued protection against fire hazard.
   Replace only with same type and rated fuse(s) as specified.

4. Use specified internal wiring. Note especially:
   1) Wires covered with PVC tubing
   2) Double insulated wires
   3) High voltage leads

5. Use specified insulating materials for hazardous live parts. Note especially:
   1) Insulation Tape
   2) PVC tubing
   3) Spacers
   4) Insulation sheets for transistors
   5) Barrier

6. When replacing AC primary side components (transformers, power cords, noise blocking capacitors, etc.) wrap ends of wires securely about the terminals before soldering.

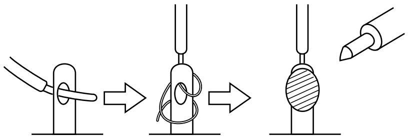


Fig.1

7. Observe that wires do not contact heat producing parts (heatsinks, oxide metal film resistors, fusible resistors, etc.)

8. Check that replaced wires do not contact sharp edged or pointed parts.

9. When a power cord has been replaced, check that 10-15 kg of force in any direction will not loosen it.

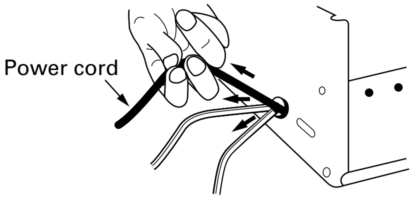


Fig.2

10. Also check areas surrounding repaired locations.

11. Products using cathode ray tubes (CRTs)
    In regard to such products, the cathode ray tubes themselves, the high voltage circuits, and related circuits are specified for compliance with recognized codes pertaining to X-ray emission. Consequently, when servicing these products, replace the cathode ray tubes and other parts with only the specified parts. Under no circumstances attempt to modify these circuits. Unauthorized modification can increase the high voltage value and cause X-ray emission from the cathode ray tube.

12. Crimp type wire connector
    In such cases as when replacing the power transformer in sets where the connections between the power cord and power transformer primary lead wires are performed using crimp type connectors, if replacing the connectors is unavoidable, in order to prevent safety hazards, perform carefully and precisely according to the following steps.

    1) **Connector part number** : E03830-001
    2) **Required tool :** Connector crimping tool of the proper type which will not damage insulated parts.
    3) **Replacement procedure**
       (1) Remove the old connector by cutting the wires at a point close to the connector.
       Important : Do not reuse a connector (discard it).

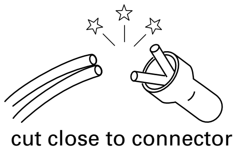


Fig.3

(2) Strip about 15 mm of the insulation from the ends of the wires. If the wires are stranded, twist the strands to avoid frayed conductors.

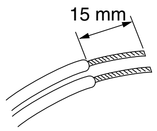


Fig.4

(3) Align the lengths of the wires to be connected. Insert the wires fully into the connector.

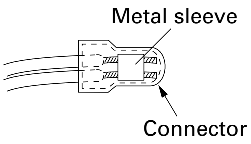


Fig.5

(4) As shown in Fig.6, use the crimping tool to crimp the metal sleeve at the center position. Be sure to crimp fully to the complete closure of the tool.

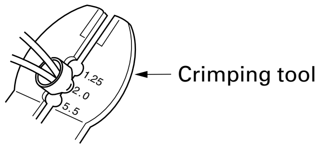


Fig.6

(5) Check the four points noted in Fig.7.

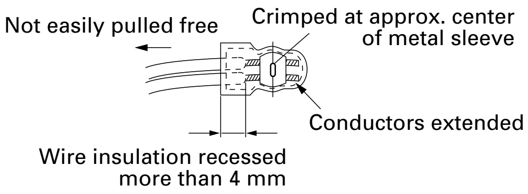

Not easily pulled free
Crimped at approx. center of metal sleeve
Conductors extended
Wire insulation recessed more than 4 mm

Fig.7

● Safety Check after Servicing

Examine the area surrounding the repaired location for damage or deterioration. Observe that screws, parts and wires have been returned to original positions, Afterwards, perform the following tests and confirm the specified values in order to verify compliance with safety standards.

1. **Insulation resistance test**
   Confirm the specified insulation resistance or greater between power cord plug prongs and externally exposed parts of the set (RF terminals, antenna terminals, video and audio input and output terminals, microphone jacks, earphone jacks, etc.). See table 1 below.

2. **Dielectric strength test**
   Confirm specified dielectric strength or greater between power cord plug prongs and exposed accessible parts of the set (RF terminals, antenna terminals, video and audio input and output terminals, microphone jacks, earphone jacks, etc.). See table 1 below.

3. **Clearance distance**
   When replacing primary circuit components, confirm specified clearance distance (d), (d') between soldered terminals, and between terminals and surrounding metallic parts. See table 1 below.

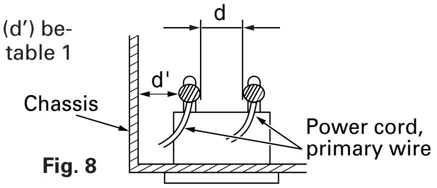


Fig. 8

4. **Leakage current test**
   Confirm specified or lower leakage current between earth ground/power cord plug prongs and externally exposed accessible parts (RF terminals, antenna terminals, video and audio input and output terminals, microphone jacks, earphone jacks, etc.).
   Measuring Method : (Power ON)
   Insert load Z between earth ground/power cord plug prongs and externally exposed accessible parts. Use an AC voltmeter to measure across both terminals of load Z. See figure 9 and following table 2.

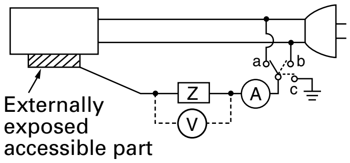


Fig. 9

5. **Grounding (Class Ⅰ model only)**
   Confirm specified or lower grounding impedance between earth pin in AC inlet and externally exposed accessible parts (Video in, Video out, Audio in, Audio out or Fixing screw etc.).
   Measuring Method:
   Connect milli ohm meter between earth pin in AC inlet and exposed accessible parts. See figure 10 and grounding specifications.

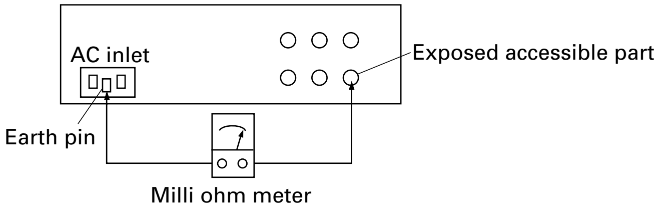


Fig. 10

Grounding Specifications

Region	Grounding Impedance (Z)
USA & Canada	Z ≦ 0.1 ohm
Europe & Australia	Z ≦ 0.5 ohm

AC Line Voltage	Region	Insulation Resistance (R)	Dielectric Strength	Clearance Distance (d), (d')
100 V	Japan	R ≧ 1 MΩ/500 V DC	AC 1 kV 1 minute	d, d' ≧ 3 mm
100 to 240 V			AC 1.5 kV 1 miute	d, d' ≧ 4 mm
110 to 130 V	USA & Canada	–	AC 900 V 1 minute	d, d' ≧ 3.2 mm
110 to 130 V 200 to 240 V	Europe & Australia	R ≧ 10 MΩ/500 V DC	AC 3 kV 1 minute (Class Ⅱ) AC 1.5 kV 1 minute (Class Ⅰ)	d ≧ 4 mm d' ≧ 8 mm (Power cord) d' ≧ 6 mm (Primary wire)

Table 1 Specifications for each region

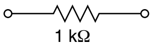
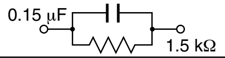
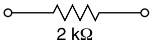
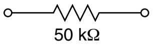
AC Line Voltage	Region	Load Z	Leakage Current (i)	a, b, c
100 V	Japan	 1 kΩ	i ≦ 1 mA rms	Exposed accessible parts
110 to 130 V	USA & Canada	 0.15 μF 1.5 kΩ	i ≦ 0.5 mA rms	Exposed accessible parts
110 to 130 V 220 to 240 V	Europe & Australia	 2 kΩ	i ≦ 0.7 mA peak i ≦ 2 mA dc	Antenna earth terminals
		 50 kΩ	i ≦ 0.7 mA peak i ≦ 2 mA dc	Other terminals

Table 2 Leakage current specifications for each region

Note: These tables are unofficial and for reference only. Be sure to confirm the precise values for your particular country and locality.

SECTION 1
SERVICE CAUTIONS AND DISASSEMBLY

1.1 HOW TO REMOVE THE COSMETIC PARTS

1.1.1 Left side cover

(1) Remove the two screws ①, slide the cassette cover downward and pull out to remove.

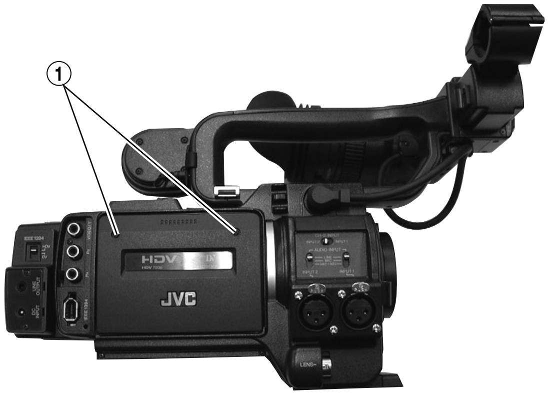


Fig. 1.1.1 (1)

Note :
When attaching the cassette cover, make sure to insert the hook of the cassette cover to the correct position of the cassette housing.

(2) Remove the two screws ②.

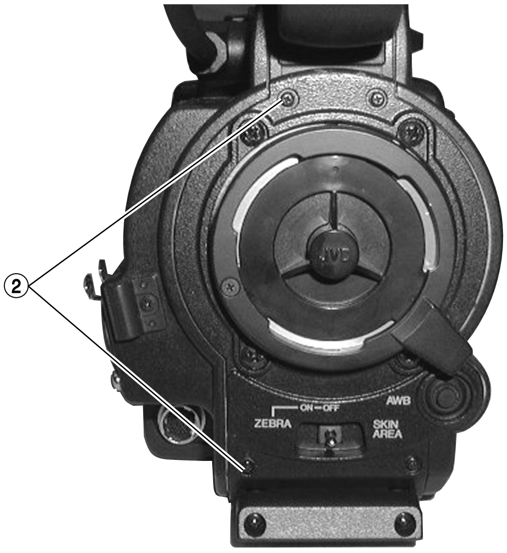

②
JVC
ZEBRA
ON – OFF
AWB
SKIN AREA

Fig. 1.1.1 (2)

(3) Remove the two screws ③ and open the left side cover.

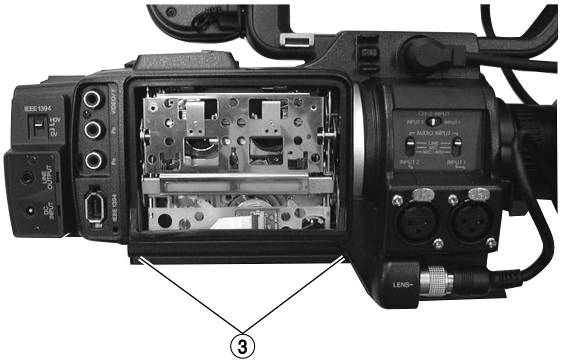


Fig. 1.1.1 (3)

(4) Disconnect the cables CN13 and CN43.

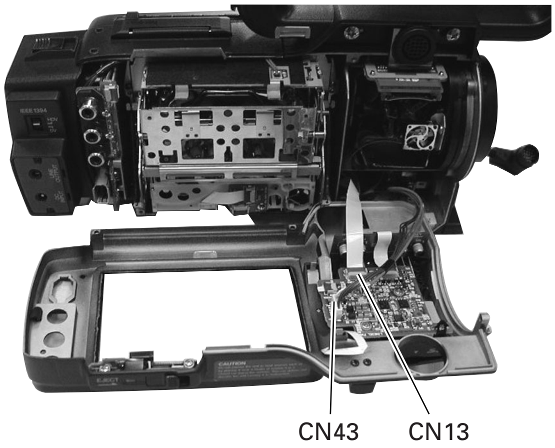


Fig. 1.1.1 (4)

1.1.2 Right side cover

(1) Remove the five screws ④ and open the right side cover.

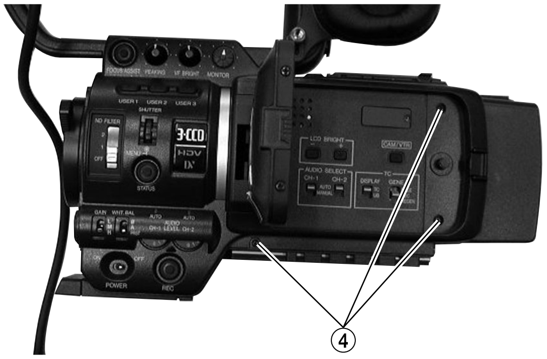

④
3-CCD
HDV
POWER
REC
STATUS

Fig. 1.1.2 (1)

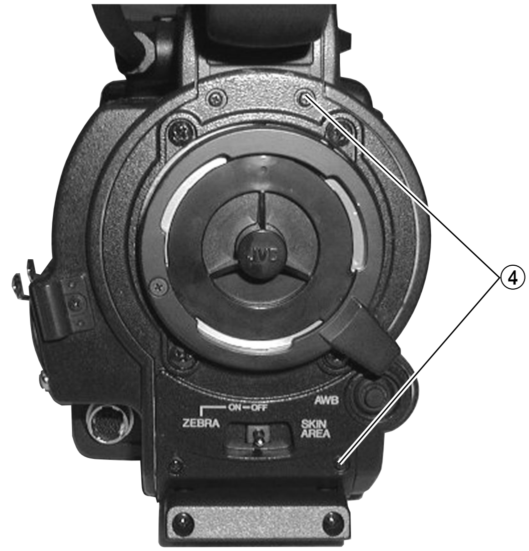

④
JVC
ZEBRA
ON – OFF
AWB
SKIN AREA

Fig. 1.1.2 (2)

(2) Disconnect the cables CN14, CN24 and CN43 on AUDIO board, CN10 and CN52 on STA board, CN52 on SWP board.

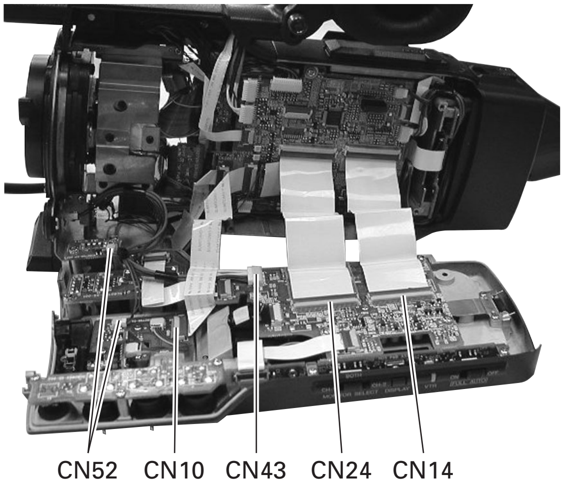

CN52
CN10
CN43
CN24
CN14

Fig. 1.1.2 (3)

1.2 HOW TO REMOVE THE OPTICAL BLOCK ASSEMBLY

CAUTION

When removing/mounting the optical block assembly in the camera, take care not to damage cables, also the positioning of the wire assembly is important. A malfunction may occur if a wire is somehow caught up.

(1) Remove left side cover and the right side cover. (see section 1.1.1 and 1.1.2)

(2) Remove the two screws ① and remove the FAN motor.

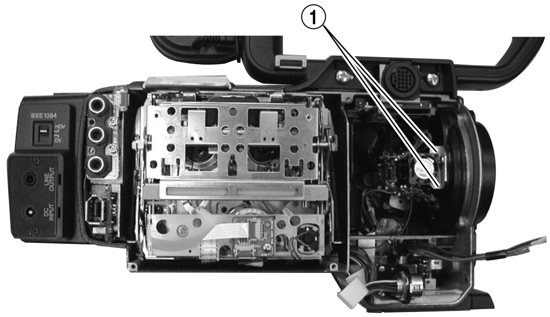


Fig. 1.2 (1)

(3) Remove the two screws ② and remove the SD board.

(4) Disconnect the cables CN26, CN27 and CN28.

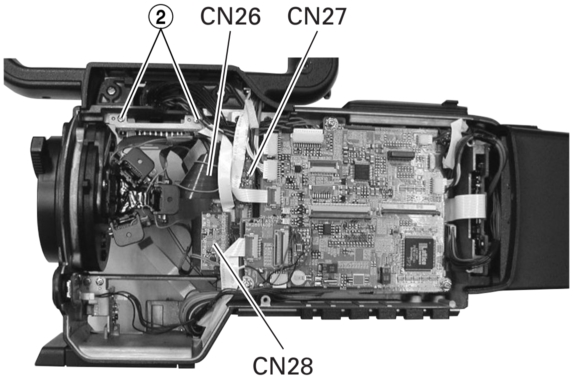

②
CN26
CN27
CN28

Fig. 1.2 (2)

(5) Remove the five screws ③ 3 and ④ , then remove the optical block assembly carefully not to damage boards and cables.

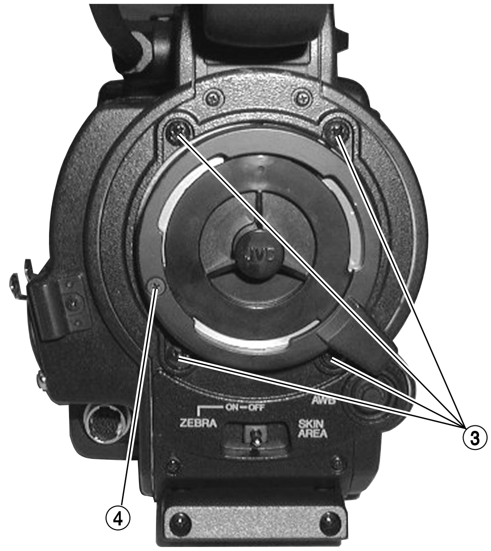


Fig. 1.2 (3)

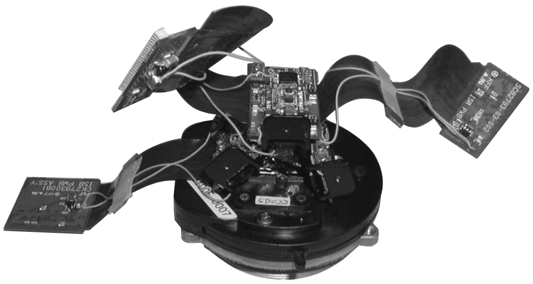


Fig. 1.2 (4)

Note :

- The CCDs are bonded precisely to the prism. In case of trouble with a CCD, it is not possible to replace an individual CCD, but the entire optical block assembly should be replaced.
- The optical block assembly supplied as a service part.
- When replacing the optical block, attach the original FAN and FNC board to the new optical block because those are not included on the optical block assembly.

1.3 HOW TO REMOVE VCR UNIT

1.3.1 Mechanism unit

(1) Remove the left side cover. (see section 1.1.1)

(2) Remove the four screws ①.

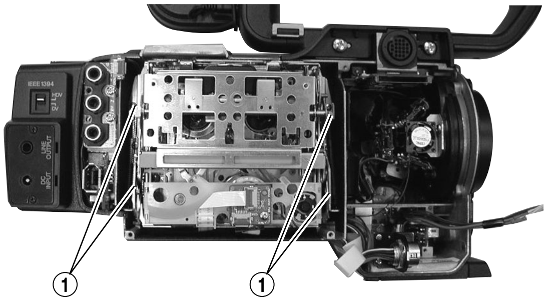


Fig. 1.3.1(1)

(3) Lift up the mechanism unit gently and disconnect the cablesCN75, CN16 and CN17.

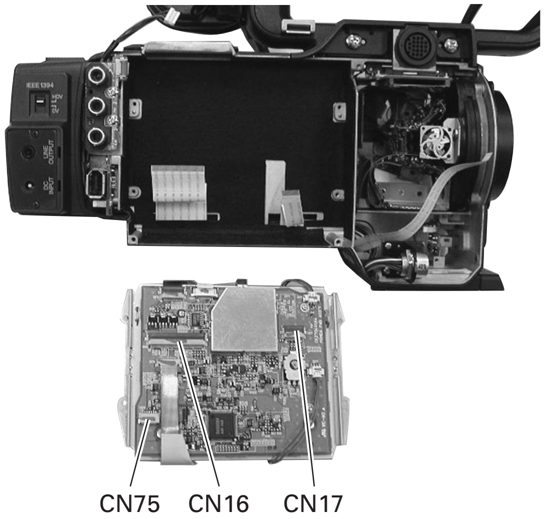


Fig. 1.3.1(2)

1.3.2 Cassette housing

(1) Remove the mechanism unit. (see section 1.3.1)

(2) Remove CN1 and release the motor wire. Release the lock sideways and remove the tape guard

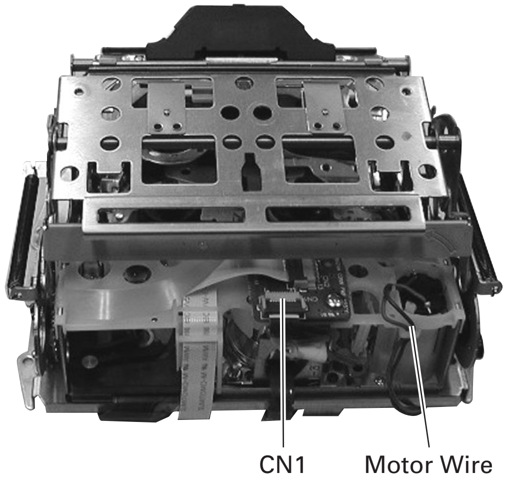


Fig. 1.3.2(1)

(3) Pop up the cassette housing by sliding release lever and remove the two screws ②.

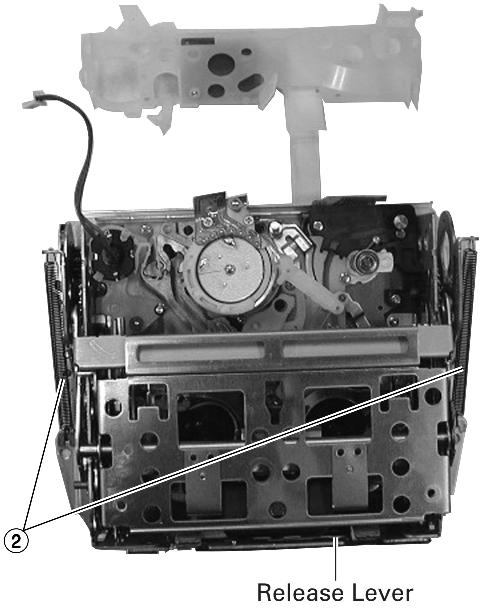


Fig. 1.3.2(2)

(4) Slide the outer unit to rear direction and lift up slightly. Pull out to side direction to release the outer unit. Perform same manner other side.

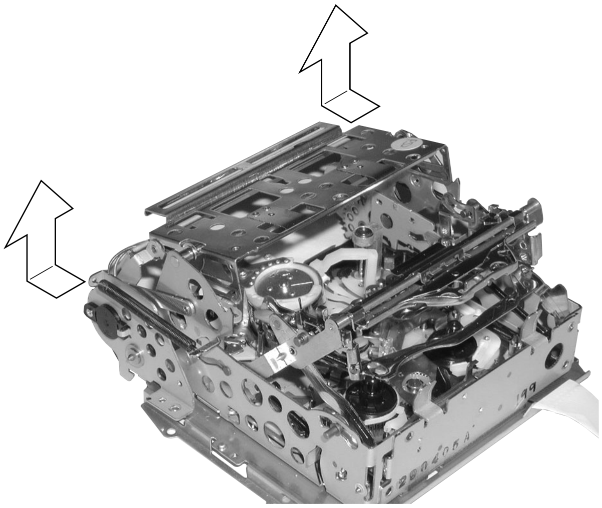


Fig. 1.3.2(3)

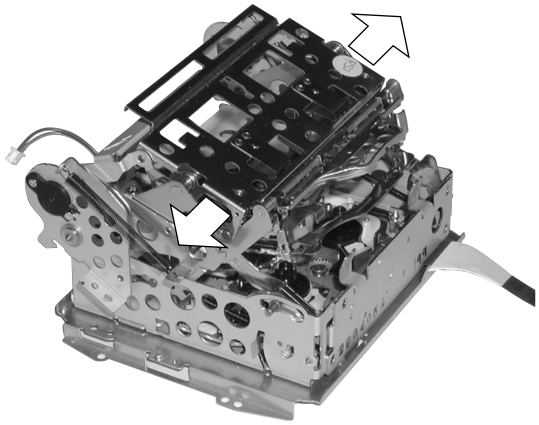


Fig. 1.3.2(4)

(5) Slide the cassette housing to the position of fig.1.3.2(5) and hold the cassette housing slightly to inside direction to release it.

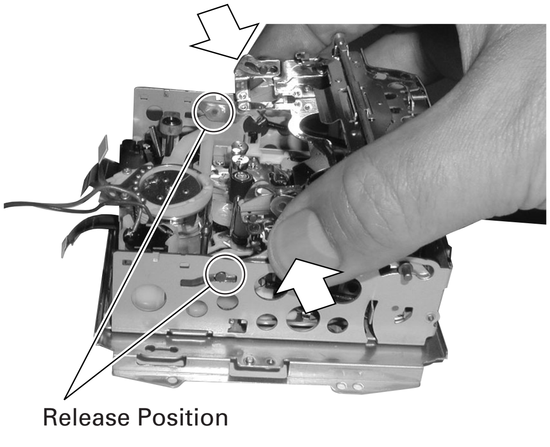


Fig. 1.3.2(5)

(6) Release bosses of the cassette housing from the mechanism unit.

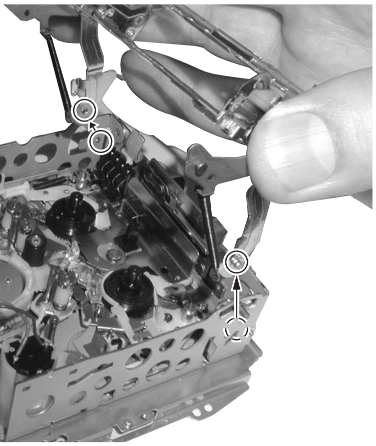


Fig. 1.3.2(6)

1.4 HOW TO REMOVE THE MAJOR BOARDS

1.4.1 Audio board

(1) Remove right side cover. (see section 1.1.2)
(2) Disconnect cables CN44, CN45 and CN62.
(3) Remove six screws ① and ②.

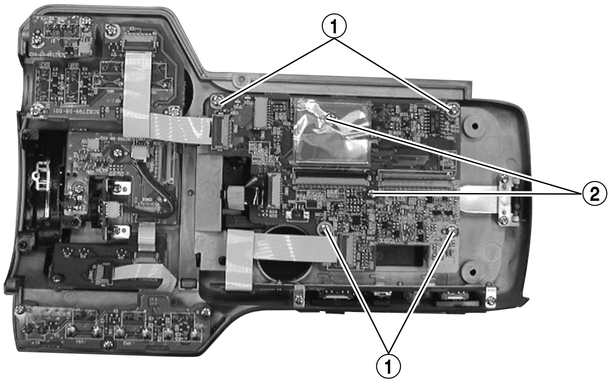


Fig. 1.4.1(1)

Note :
CN62 may be slightly hard to connect FPC cable. Make sure to insert the cable to correct position.

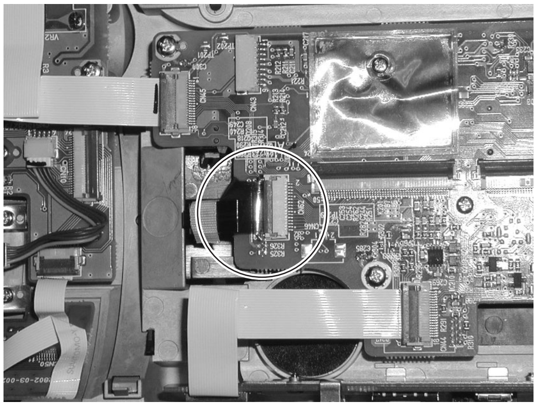


Fig. 1.4.1(2)

1.4.2 LCD monitor

(1) Remove Audio board. (see section 1.4.1)
(2) Remove two screws ③.

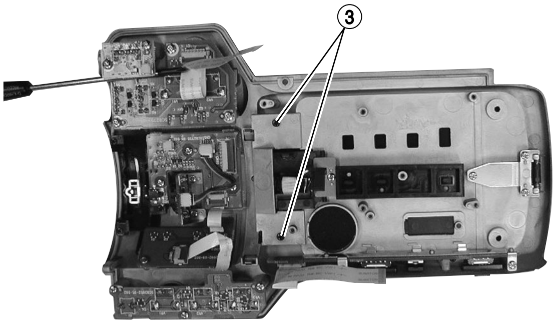
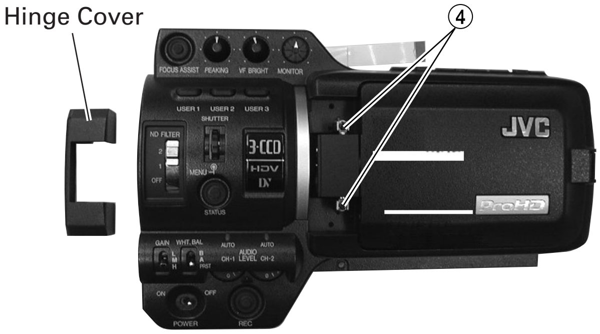


Fig. 1.4.2(1)

(3) Remove the hinge cover and remove two screws ④.



Hinge Cover
④
FOCUS ASSIST
PEAKING
VF BRIGHT
MONITOR
USER 1
USER 2
USER 3
SHUTTER
ND FILTER
OFF
MENU
STATUS
3-CCD
HDV
DV
JVC
ProHD
GAIN
WHT. BAL
AUTO
AUDIO LEVEL
CH-1
CH-2
ON
OFF
POWER
REC

Fig. 1.4.2(2)

1.4.3 MIF board

(1) Remove the right side cover. (see section 1.1.2)

(2) Remove four screws ⑤.

(3) Remove the cables CN4, CN9, CN11, CN12, CN13, CN22, CN23, 34 and CN48, then lift up MIF board to release B to B connector between MIF board and MAIN board.

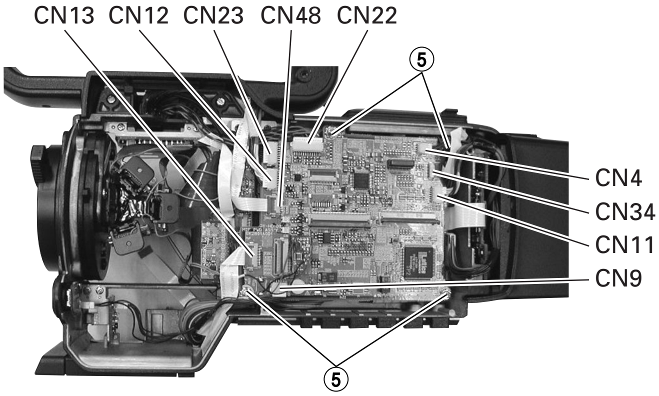

CN13
CN12
CN23
CN48
CN22
⑤
CN4
CN34
CN11
CN9
⑤

Fig. 1.4.3

1.4.4 MAIN board

(1) Remove MIF board. (see section 1.4.3)

(2) Remove six screws ⑥ and ⑦.

(3) Remove the cables CN3, CN16, CN17, CN18, CN19, CN26, CN27, CN28, CN29 and CN30.

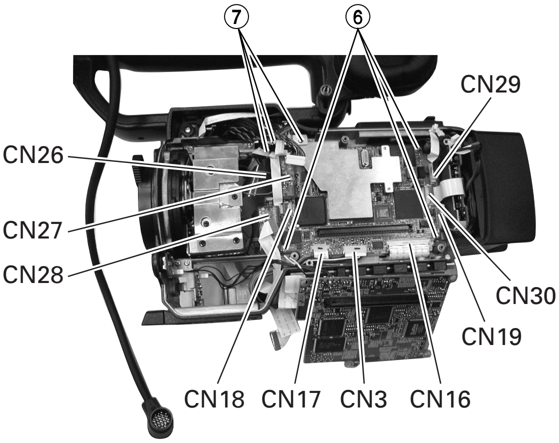

⑦
⑥
CN29
CN26
CN27
CN28
CN30
CN19
CN18
CN17
CN3
CN16

Fig. 1.4.4(1)

(4) Slide the MAIN board downward and pull out. Do not bend the Heat Pipe.

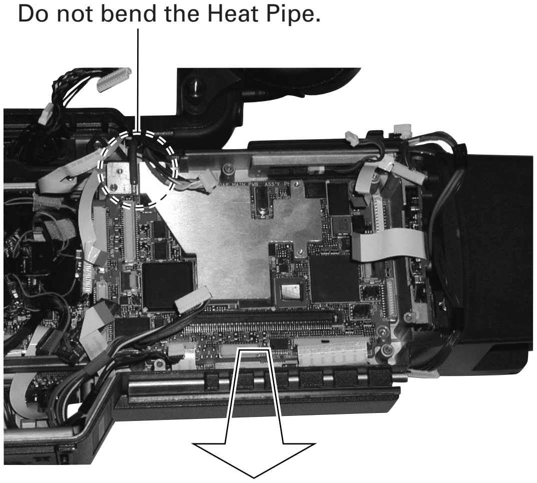

Do not bend the Heat Pipe.

Fig. 1.4.4(2)

(5) Remove the two screws ⑧. Remove the heat sink carefully because it is being fitted sticky.

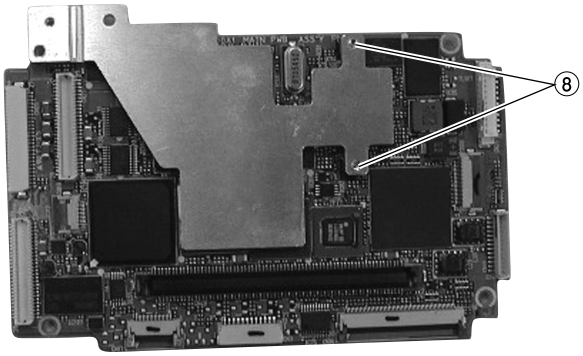


Fig. 1.4.4(3)

1.4.5 HANDLE assembly

(1) Remove left side cover and right side cover. (see section 1.1.1 and 1.1.2)

(2) Remove two screws ⑨.

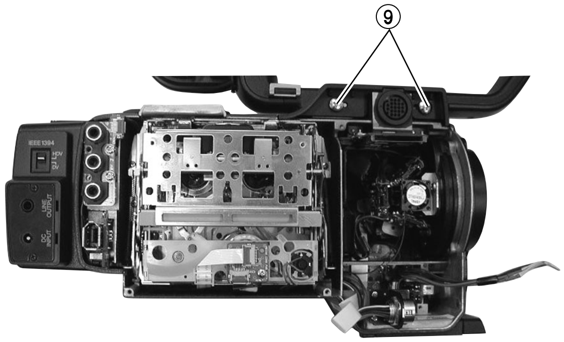


Fig. 1.4.5(1)

(3) Remove the cables CN12 and CN48. Remove the two screws ⑩ and lift up the handle assembly.

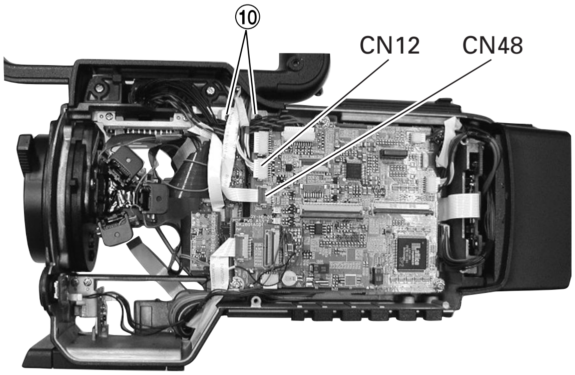


Fig. 1.4.5(2)

(4) Remove three screws ⑪.

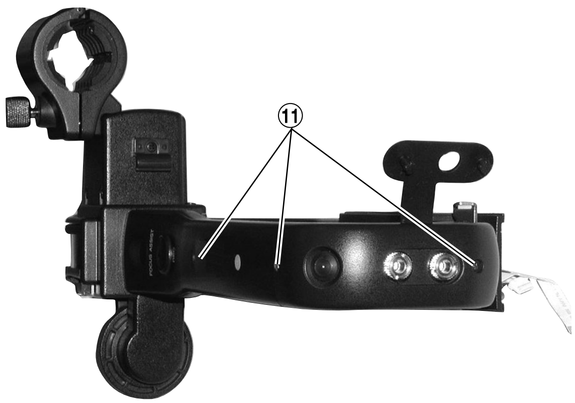


Fig. 1.4.5(3)

(5) Remove the handle cover R and handle cover T.

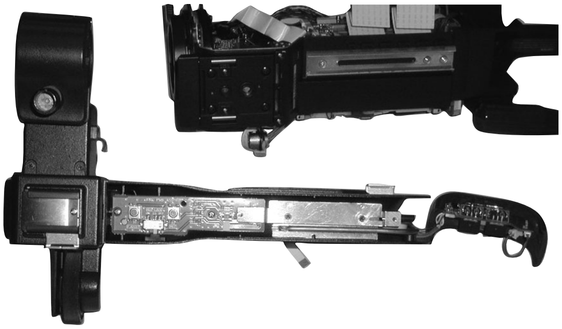


Fig. 1.4.5(4)

Note :
When connecting the LED connector on EAR board, ensure the polarity that the red wire should be connected longer pin of LED.

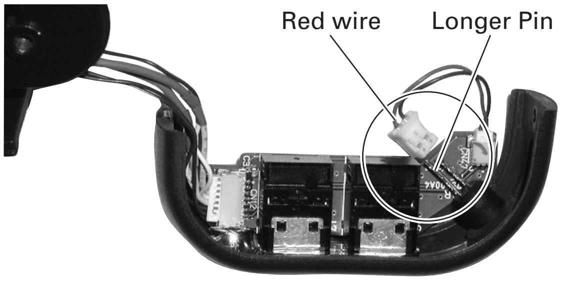

Red wire
Longer Pin

Fig. 1.4.5(5)

Note :
When removing the Heat Sink Ass'y, bend the Heat Pipe slightly like Fig. 1.4.5(6).
Return the bend after attaching the Heat Sink Ass'y.
Do not bend the other portion of Heat Pipe.

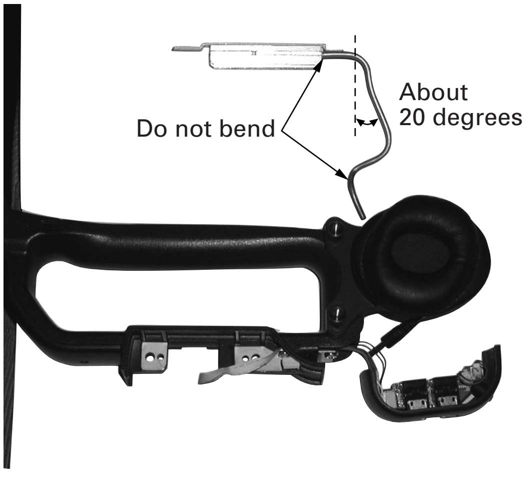

About
20 degrees
Do not bend

Fig. 1.4.5(6)

1.4.6 PS board

(1) Remove the four screws ⑫.

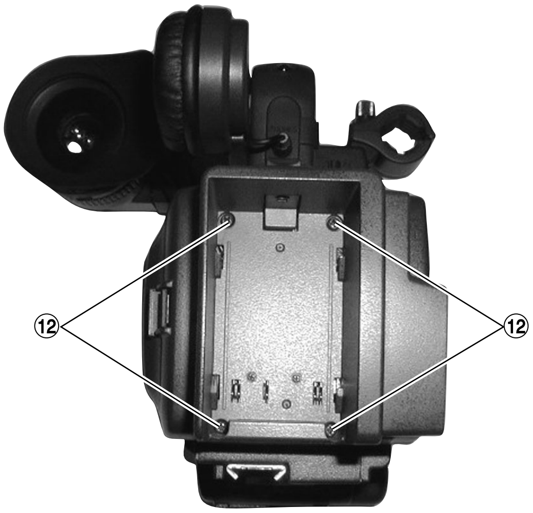


Fig. 1.4.6(1)

(2) Remove the four screws ⑬ and ⑭. Disconnect the cables CN1, 29, CN30, CN53 and CN75.

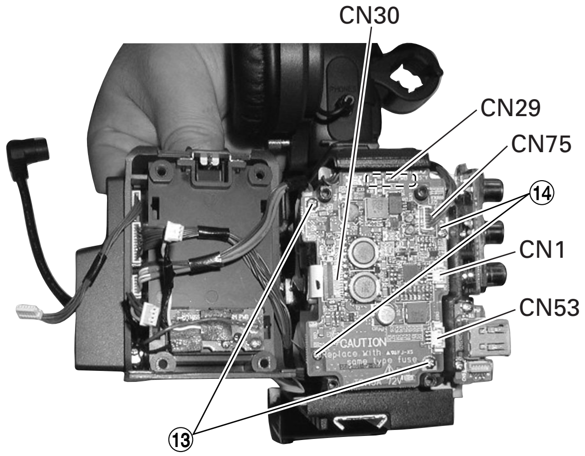


Fig. 1.4.6(2)

Note :
When replacing the fuse F1, ensure to replace with same type fuse. (refer to the parts list)

1.5 SERVICE MENUS

1.5.1 Modes required in servicing

(1) While holding down the specified button(s) (FOCUS ASSIST, USER 3), press and hold the STATUS button for more than 1 second in order to display the first-level menu of the service menu hierarchy. The items in the first-level menu vary according to which specified button is being held at the moment the STATUS button is pressed. (Characters are displayed on LCD monitor screen or View finder.)

Item	Displayed Content	When power up		
		–	Holding DISPLAY button	Holding DISPLAY button
		Activation Method		
		FOCUS ASSIST	USER 3	FOCUS ASSIST + USER 3
CAMERA1 MENU	Camera setting, blemish detect	○	○	○
CAMERA2 MENU	Error correct ON/OFF	–	○	○
CAMERA3 MENU	AW data reset menu	–	–	○
VTR1 MENU	Repeat, FF/REW speed setting	○	○	○
VTR2 MENU	Long pause, shutdown setting	–	○	○
VTR3 MENU	Reserved, BATT, Info.	–	–	○
DIP SW	DIP SW MENU	–	○	○
HOUR METER	Hour Meter indication	–	○	○
ERROR HISTORY	Error History	–	○	○
OTHERS	MENU SAVE etc.	–	○	○
VERSION	CPU Version indication	○	–	–

Table 1-5-1 Service Menu First Tier List

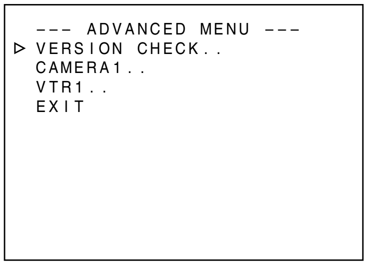
1.5.2 Operation in the first-level of the service menu

(1) While holding down the specified button(s) (FOCUS ASSIST or USER 3), press and hold the STATUS button for more than 1 second.

(2) The first-level of the service menu is displayed.

(3) Rotate the SHUTTER dial to move the cursor (▷) on to the item to be modified.

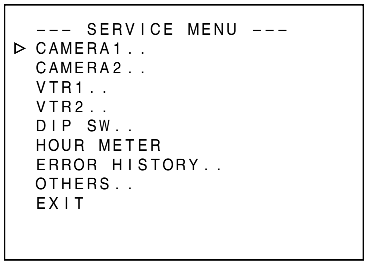
(4) Push into the SHUTTER dial to direct the item on which the cursor (▷) is located.
- Pressing the STATUS button returns to the MENU display.
- Can not open the service MENU while recording.



```
  --- ADVANCED MENU ---
▷ VERSION CHECK..
  CAMERA1..
  VTR1..
  EXIT
```

Fig. 1-5-2 (1)

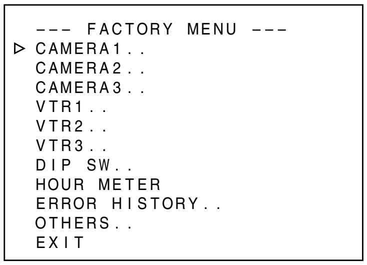
While holding down the FOCUS ASSIST button, press and hold STATUS button for more than 1 second, this MENU screen is shown on the monitor. (Refer to Fig. 1-5-2(1))



```
--- SERVICE MENU ---
▷ CAMERA1..
  CAMERA2..
  VTR1..
  VTR2..
  DIP SW..
  HOUR METER
  ERROR HISTORY..
  OTHERS..
  EXIT
```

Fig. 1-5-2 (2)

At first, while holding down the DISPLAY button, turn ON the power switch, and then, while holding down the USER 3 button, press and hold STATUS button for more than 1 second, this MENU screen is shown on the monitor. (Refer to Fig. 1-5-2(2))



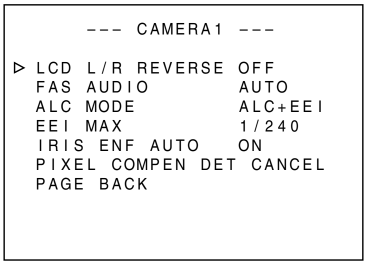
```
--- FACTORY MENU ---
▷ CAMERA1..
  CAMERA2..
  CAMERA3..
  VTR1..
  VTR2..
  VTR3..
  DIP SW..
  HOUR METER
  ERROR HISTORY..
  OTHERS..
  EXIT
```

Fig. 1-5-2 (3)

At first, while holding down the DISPLAY button, turn ON the power switch, and then, While holding down the FOCUS ASSIST and USER 3 button, press and hold STATUS button for more than 1 second, this MENU screen is shown on the monitor. (Refer to Fig. 1-5-2(3))

1.5.3 CAMERA 1 menu

(1) In a service menu, place the cursor (▷) on “CAMERA 1” and push the SHUTTER dial to display the CAMERA1 menu.



```
      --- CAMERA1 ---

▷ LCD L/R REVERSE OFF
  FAS AUDIO        AUTO
  ALC MODE         ALC+EEI
  EEI MAX          1/240
  IRIS ENF AUTO    ON
  PIXEL COMPEN DET CANCEL
  PAGE BACK
```

Fig. 1-5-3 (1)

(2) Rotate the SHUTTER dial to move the cursor (▷) on the mode to be adjusted.
(3) Push the SHUTTER dial so that the parameter blinks.
(4) Rotate the SHUTTER dial to vary the parameter.
(5) After completing the parameter setting, push the SHUTTER dial to stop the blinking of the parameter and store the setting in memory.
(6) After completing the setting, move the cursor (▷) to “PAGE BACK” and push the SHUTTER dial to return to the display at the higher hierarchy level.

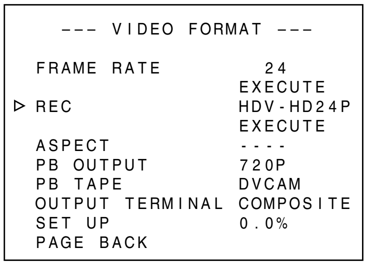
Item	Parameter		
LCD L/R REVERSE	$\boxed{\text{OFF}}$		When the face of LCD screen is turned toward the camera subject, does not invert the left and right of the LCD display. (normal image)
	ON		When the face of LCD screen is turned toward the camera subject, inverts the left and right of the LCD display. (mirror image)
FAS AUDIO	$\boxed{\text{AUTO}}$		When selected FAS mode, audio recording Level will be automatically set to AUTO mode.
	SW SET		When selected FAS mode, audio recording level will be depending on switch setting.
ALC MODE	$\boxed{\text{ALC + EEI}}$		When selected ALC mode including FAS mode, EEI function will be activated.
	ONLY ALC		When selected ALC mode including FAS mode, EEI function will not be activated.
EEI MAX	U MODEL	1/240	Maximum shutter speed is set to 1/240 second.
		$\boxed{\text{1/480}}$	Maximum shutter speed is set to 1/480 second.
		1/960	Maximum shutter speed is set to 1/960 second.
	E MODEL	1/200	Maximum shutter speed is set to 1/200 second.
		$\boxed{\text{1/400}}$	Maximum shutter speed is set to 1/400 second.
		1/800	Maximum shutter speed is set to 1/800 second.
IRIS ENF. AUTO	OFF		When selected FULL AUTO mode, IRIS mode will be depeng on IRIS MODE switch of the lens.
	$\boxed{\text{ON}}$		When selected FULL AUTO mode, Auto Iris mode will be activated even Manual Iris mode is selected.
PIXEL COMPEN DET	$\boxed{\text{CANCEL}}$		Does not execute blemish detection.
	EXECUTE		Execute blemish detection.

(☐ indicates the factory setting.)

Table 1-5-3 (1)

■ White blemish detection

Open the User MENU, select "VIDEO FORMAT", "REC", set to "HDV-HD24P" and push the SHUTTER dial.
Select "FRAME RATE", set to "24" and push the SHUTTER dial. Select "EXECUTE", push the SHUTTER dial, then GY-HD100 is automatically rebooted.

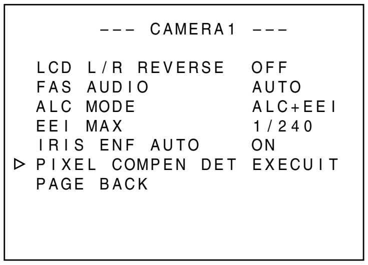


```
    --- VIDEO FORMAT ---

  FRAME RATE          24
                    EXECUTE
▷ REC               HDV-HD24P
                    EXECUTE
  ASPECT            ----
  PB OUTPUT         720P
  PB TAPE           DVCAM
  OUTPUT TERMINAL   COMPOSITE
  SET UP            0.0%
  PAGE BACK
```

Fig. 1-5-3 (2)

Open the Service MENU, select "CAMERA1", "PIXEL COMPEN DET", "EXECUTE" and push the SHUTTER dial, then CCD white blemish detect operation start automatically.
At this time, the lens is closed and the camera is in the SLOW SHUTTER
mode.



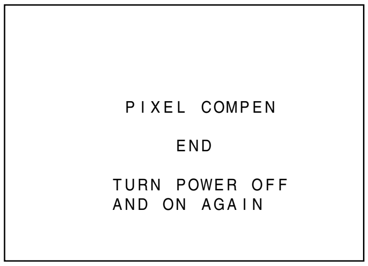
```
        --- CAMERA1 ---

  LCD L/R REVERSE   OFF
  FAS AUDIO         AUTO
  ALC MODE          ALC+EEI
  EEI MAX           1/240
  IRIS ENF AUTO     ON
▷ PIXEL COMPEN DET  EXECUIT
  PAGE BACK
```

Fig. 1-5-3 (3)

After completing white blemish detection, return "REC" and "FRAME RATE" setting to original one's.

When the white blemish detection completes, the result data is stored in the memory of CPU,
end message is shown as below, then please turn off.



```
     PIXEL COMPEN

         END

    TURN POWER OFF
    AND ON AGAIN
```

Fig. 1-5-3 (4)

If any errors occurs during the detection operation, an error message is displayed , and return to MENU display.

Message	Error details	Treatment
LENS NOT CLOSED?	The lens does not close for detection.	No result is stored in the EEPROM.
COUNT OVER	The number exceeds the specified count.	Only the specified count of data is stored in the EEPROM.

Table 1-5-3 (2)

■ **Details on correctable white blemish**

Up to 127 errors with composite video levels of 50mV or more can be corrected. No limitation of errors per line within 127 however, the maximum consecutive errors are 4 and the correction results may be inferior to the case of single error correction.
Oblique noise may be observed on the screen during white blemish detection. This is due to the principles of error correction and is not a malfunction.
White blemish can be detected in the following area.

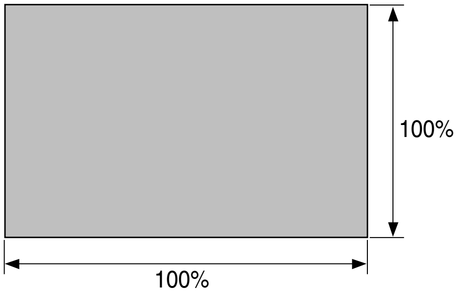
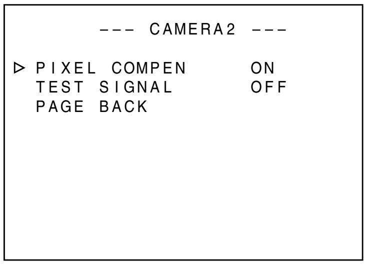


Fig. 1-5-3 (5)

1.5.4 CAMERA 2 menu

(1) In a service menu, place the cursor on “CAMERA 2” and push the SHUTTER dial to display the CAMERA2 menu.



```
        --- CAMERA2 ---

▷ PIXEL COMPEN      ON
  TEST SIGNAL       OFF
  PAGE BACK
```

Fig. 1-5-4

Operation ways are almost same as CAMERA 1 MENU, so please refer it.

Item	Parameter	
PIXEL COMPEN *1	OFF	Does not correct the detected white blemish.
	ON	Corrects the detected white blemish.
	CHECK	Light up the pixels which are the detected white blemish.

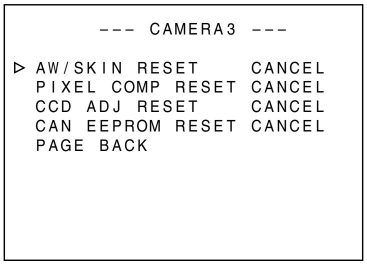
(☐ indicates the factory setting.)

Table 1-5-4

*1: This mode is automatically set to ON when the power is turned on.
The OFF mode is enabled only after it is set to OFF at this screen until the power is turned off.

1.5.5 CAMERA 3 menu

In a service menu, place the cursor on "CAMERA 3" and push the SHUTTER dial to display the CAMERA3 menu.



```
        --- CAMERA3 ---

▷ AW/SKIN RESET      CANCEL
  PIXEL COMP RESET   CANCEL
  CCD ADJ RESET      CANCEL
  CAN EEPROM RESET   CANCEL
  PAGE BACK
```

Fig. 1-5-5

Operation ways are almost same as CAMERA 1 MENU, so please refer it.

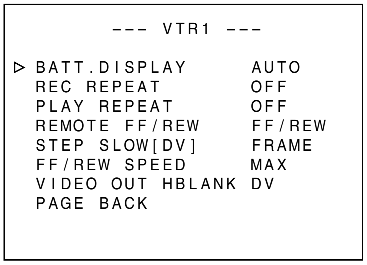
Item	Parameter	
AW/SKIN RESET	$\boxed{\text{CANCEL}}$	Does not reset the auto white data and the skin detect data.
	EXECUTE	Resets the auto white data and the skin detect data.
PIXEL COMP RESET	$\boxed{\text{CANCEL}}$	Does not reset the detected white blemish data.
	EXECUTE	Resets the detected white blemish data.
CCD ADJ RESET	$\boxed{\text{CANCEL}}$	Does not reset the CCD adjustment data.
	EXECUTE	Resets the CCD adjustment data.
CAM EEPROM RESET	$\boxed{\text{CANCEL}}$	Does not reset the EEPROM data for CAMERA CPU.
	EXECUTE	Resets the EEPROM data for CAMERA CPU.

($\boxed{}$ indicates the factory setting.)

Table 1-5-5

1.5.6 VTR 1 menu

In a service menu, place the cursor on "VTR 1" and push the SHUTTER dial to display the VTR 1 menu.



```
        --- VTR1 ---

▷ BATT.DISPLAY       AUTO
  REC REPEAT         OFF
  PLAY REPEAT        OFF
  REMOTE FF/REW      FF/REW
  STEP SLOW[DV]      FRAME
  FF/REW SPEED       MAX
  VIDEO OUT HBLANK   DV
  PAGE BACK
```

Fig. 1-5-6

Operation ways are almost same as CAMERA 1 MENU, so please refer it.

Item	Parameter	
BATT. DISPLAY	OFF	Does not indicate the Battery information.
	$\boxed{\text{AUTO}}$	Show the Battery information as Battery Info of VTR3 MENU.
REC REPEAT	$\boxed{\text{OFF}}$	Disable repeat recording
	2	Perform repeat recording 2 times.
	5	Perform repeat recording 5 times.
	12	Perform repeat recording 12 times.
	ON	Enable full repeat recording.
PLAY REPEAT	$\boxed{\text{OFF}}$	Disable repeat playback.
	ON	Enable repeat playback.
REMOTE FF/REW	$\boxed{\text{FF/REW}}$	When FF/REW command is received from REMOTE, it runs as FF/REW mode.
	SEARCH	When FF/REW command is received from REMOTE, it runs as search FWD/REV mode.
STEP SLOW [DV]	FIELD	
	$\boxed{\text{FRAME}}$	
FF/REW SPEED	X5	Maximum FF/REW speed is limited up to x5.
	X7.5	Maximum FF/REW speed is limited up to x7.5.
	X10	Maximum FF/REW speed is limited up to x10.
	$\boxed{\text{MAX}}$	*1No limitation
VIDEO OUT HBLANK	DV	Horizontal effective pixels are 720.
	$\boxed{\text{STANDARD}}$	Horizontal effective pixels are 710 at 60/30 frame rate and 702 at 50/25 frame rate.

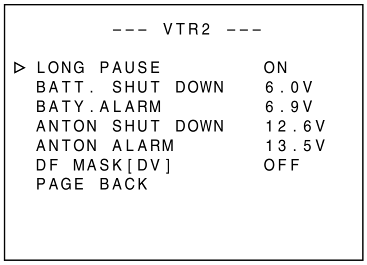
($\boxed{}$ indicates the factory setting.)

Table 1-5-6

*1: Maximum speed is x20 at VTR mode, but no function at CAM mode.

1.5.7 VTR 2 menu

In a service menu, place the cursor on “VTR 2” and push the SHUTTER dial to display the VTR 2 menu.



```
--- VTR2 ---

▷ LONG PAUSE        ON
  BATT. SHUT DOWN   6.0V
  BATY.ALARM        6.9V
  ANTON SHUT DOWN   12.6V
  ANTON ALARM       13.5V
  DF MASK[DV]       OFF
  PAGE BACK
```

Fig. 1-5-7

Operation ways are almost same as CAMERA 1 MENU, so please refer it.

Item	Parameter	
LONG PAUSE	OFF	Disable the long pause function.
	ON	Enable the long pause function.
BATT. SHUTDOWN *1	6.8V	Setting of the battery voltage when shutdown should occur. (Setting in 0.1V steps between 6.3V and 7.5V.)
BATT. ALARM *1	6.9V	Setting of the battery voltage when battery alarm is indicated. (Setting in 0.1 V steps between 6.3V and 8.0V.)
ANTON SHUT DOWN	12.0V	Setting of the ANTON battery voltage when shutdown should occur. (Setting in 0.1V steps between 10.5V and 13.6V.)
ANTON ALARM	13.5V	Setting of the ANTON battery voltage when battery alarm is indicated. (Setting in 0.1 V steps between 10.5V and 13.6V.)
DV DF MASK *2	OFF	"1" is recorded as per format.
	ON	"0" is always recorded.

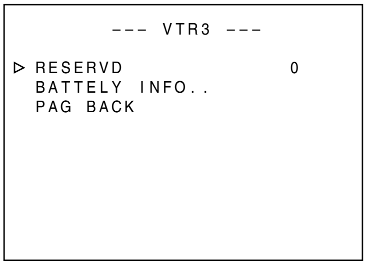
(☐ indicates the factory setting.)

Table 1-5-7

*1 : When operating by DC input, then “SHUT DOWN” will be set to 6.0V, and “ALARM” will be set to 6.9V automatically, and these setting will not relate to menu setting.
*2 : FRAME RATE 50/25 only

1.5.8 VTR 3 menu

In a service menu, place the cursor on “VTR 3” and push the SHUTTER dial to display the VTR 3 menu.



```
--- VTR3 ---

▷ RESERVD              0
  BATTELY INFO..
  PAG BACK
```

Fig. 1-5-8 (1)

Changing of setting is prohibited.

Item	Parameter	
RESERVED	0	Normal setting
BATTERY INFO		Refer to next page.

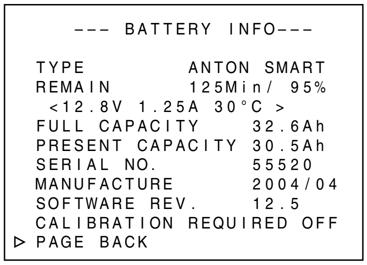
(☐ indicates the factory setting.)

Table 1-5-8 (1)

■ BATTERY INFO Display

Display method

Move the cursor to the “BATTERY INFO..” in “VTR3” screen and press SHUTTER dial. BATTERY INFO screen (right figure) will be displayed.



```
--- BATTERY INFO---

  TYPE            ANTON SMART
  REMAIN          125Min/ 95%
   <12.8V 1.25A 30°C >
  FULL CAPACITY     32.6Ah
  PRESENT CAPACITY  30.5Ah
  SERIAL NO.        55520
  MANUFACTURE       2004/04
  SOFTWARE REV.     12.5
  CALIBRATION REQUIRED OFF
▷ PAGE BACK
```

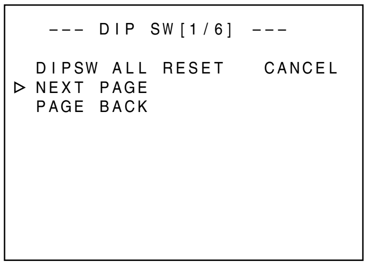
Fig.1-5-8 (2) BATTERY INFO
(When the Anton/Bauer Smart Battery is detected)

Item		Descriptions	
TYPE		ANTON SMART	When ANTON/BAUER SMART BATTERY is connected
		AFG	When BATTERY with I/F of AFG (AnalogFuelGauge) is connected
		OTHERS	When other BATTERY is connected
		NO DETECT	When no BATTERY is connected
REMAIN	Minute	Remaining battery lasting time [min] calculated based on current power consumption	
	%	Current remaining capacity [%] corresponding to total battery capacity	
	Voltage	Output voltage of battery	
	Current	Output current of battery	
	Temperature	Temperature of battery	
FULL CAPACITY		Capacity [Ah] when the BATTERY is fully charged	
PRESENT CAPACITY		Current BATTERY capacity [Ah]	
SERIAL NO.		Manufactured serial number	
MANUFACTURE		Manufactured date	
SOFTWARE REV.		Software revision number	
CALIBRATION REQUIRED		OFF Calibration not required	
		ON Calibration required	

Table 1-5-8 (2)

1.5.9 DIP SW menu

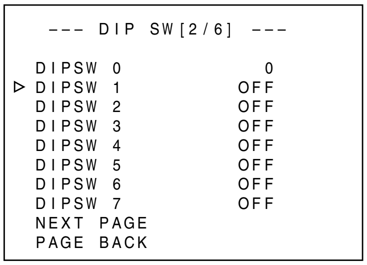
(1) In a service menu, place the cursor on “DIP SW ” and push the SHUTTER dial to display the DIP SW menu.



```
  --- DIP SW[1/6] ---

 DIPSW ALL RESET    CANCEL
▷NEXT PAGE
 PAGE BACK
```

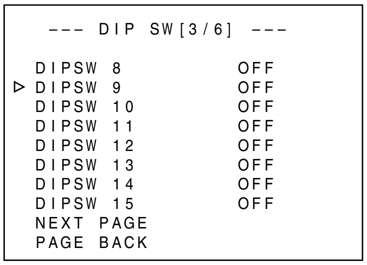
Fig. 1-5-9 (1)



```
  --- DIP SW[2/6] ---

 DIPSW 0           0
▷DIPSW 1         OFF
 DIPSW 2         OFF
 DIPSW 3         OFF
 DIPSW 4         OFF
 DIPSW 5         OFF
 DIPSW 6         OFF
 DIPSW 7         OFF
 NEXT PAGE
 PAGE BACK
```

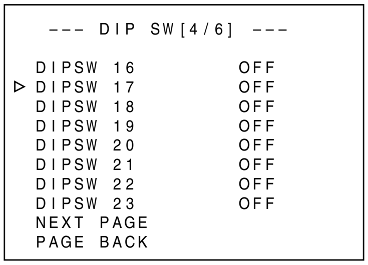
Fig. 1-5-9 (2)



```
  --- DIP SW[3/6] ---

 DIPSW 8         OFF
▷DIPSW 9         OFF
 DIPSW 10        OFF
 DIPSW 11        OFF
 DIPSW 12        OFF
 DIPSW 13        OFF
 DIPSW 14        OFF
 DIPSW 15        OFF
 NEXT PAGE
 PAGE BACK
```

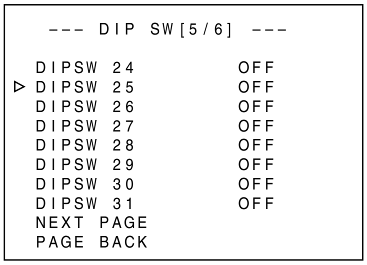
Fig. 1-5-9 (3)



```
  --- DIP SW[4/6] ---

 DIPSW 16        OFF
▷DIPSW 17        OFF
 DIPSW 18        OFF
 DIPSW 19        OFF
 DIPSW 20        OFF
 DIPSW 21        OFF
 DIPSW 22        OFF
 DIPSW 23        OFF
 NEXT PAGE
 PAGE BACK
```

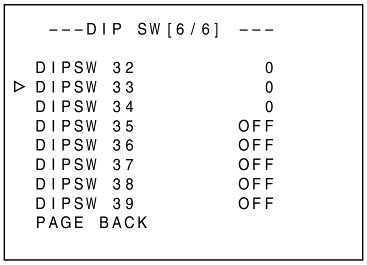
Fig. 1-5-9 (4)



```
  --- DIP SW[5/6] ---

 DIPSW 24        OFF
▷DIPSW 25        OFF
 DIPSW 26        OFF
 DIPSW 27        OFF
 DIPSW 28        OFF
 DIPSW 29        OFF
 DIPSW 30        OFF
 DIPSW 31        OFF
 NEXT PAGE
 PAGE BACK
```

Fig. 1-5-9 (5)



```
  ---DIP SW[6/6] ---

 DIPSW 32          0
▷DIPSW 33          0
 DIPSW 34          0
 DIPSW 35        OFF
 DIPSW 36        OFF
 DIPSW 37        OFF
 DIPSW 38        OFF
 DIPSW 39        OFF
 PAGE BACK
```

Fig. 1-5-9 (6)

Operation ways are almost same as CAMERA 1 menu, so please refer it.

All DIP Switch settings which are shown below should not be changed ecxept for repair or maintenance. And do not forget to return original position after repair.

Item	Parameter	Factory setting
--- DIP SW 1/6 ---		
DIP SW ALL RESET	CANCEL Cancel to reset all DIPSW settings. EXECUTE Execute to reset all DIPSW settings.	CANCEL
--- DIP SW 2/6 ---		
DIP SW 0	1 : Displays error rate monitor and CPU port information	0
DIP SW 1	ON: Disable warning message display	OFF
DIP SW 2	Change prohibited	OFF
DIP SW 3	ON: Disable DEW warning	OFF
DIP SW 4	Change prohibited	OFF
DIP SW 5	Change prohibited	OFF
DIP SW 6	Change prohibited	OFF
DIP SW 7	Change prohibited	OFF
--- DIP SW 3/6 ---		
DIP SW 8	Change prohibited	OFF
DIP SW 9	Change prohibited	OFF
DIP SW 10	ON: Displays error rate solely for audio block on the error rate monitor screen	OFF
DIP SW 11	Change prohibited	OFF
DIP SW 12	Change prohibited	OFF
DIP SW 13	Change prohibited	OFF
DIP SW 14	Change prohibited	OFF
DIP SW 15	Change prohibited	OFF
--- DIP SW 4/6 ---		
DIP SW 16	Change prohibited	OFF
DIP SW 17	Change prohibited	OFF
DIP SW 18	Change prohibited	OFF
DIP SW 19	Change prohibited	OFF
DIP SW 20	Change prohibited	OFF
DIP SW 21	Change prohibited	OFF
DIP SW 22	Change prohibited	OFF
DIP SW 23	Change prohibited	OFF
--- DIP SW 5/6 ---		
DIP SW 24	Change prohibited	OFF
DIP SW 25	Change prohibited	OFF
DIP SW 26	Change prohibited	OFF
DIP SW 27	Change prohibited	OFF
DIP SW 28	Change prohibited	OFF
DIP SW 29	Change prohibited	OFF
DIP SW 30	Change prohibited	OFF
DIP SW 31	Change prohibited	OFF
--- DIP SW 6/6 ---		
DIP SW 32	Change prohibited	0
DIP SW 33	Change prohibited	0
DIP SW 34	Change prohibited	0
DIP SW 35	Change prohibited	OFF
DIP SW 36	Change prohibited	OFF
DIP SW 37	Change prohibited	OFF
DIP SW 38	Change prohibited	OFF
DIP SW 39	Change prohibited	OFF

Table 1-5-9

ERROR RATE MONITOR screen

By setting "DIP SW 0" to "1", error rate and each CPU port information display screen will appear on the LCD monitor, View finder and monitor.

The values which are pointed by arrow are the error rate value. Error rate of CH-1 shown in upper row, and CH-2 shown in lower row, and these value are indicated total AUDIO/VIDEO error rate.

When the error rate increase , the warning message "HEAD CLEANING REQUIRED" is displayed. And this message is indicate when the error rate value is over 4,500 (one-channel AUDIO/VIDEO total) for 7 seconds consecutively.

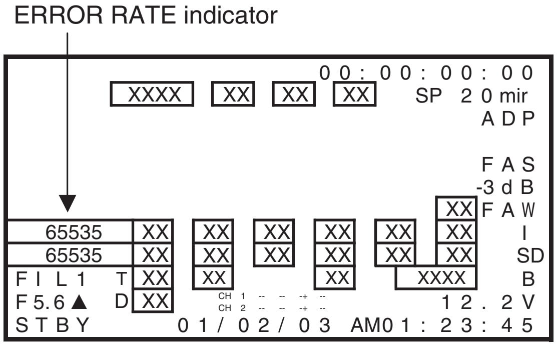
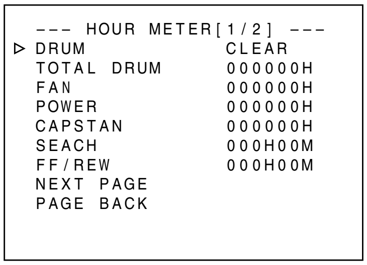


Fig. 1-5-9 (7)

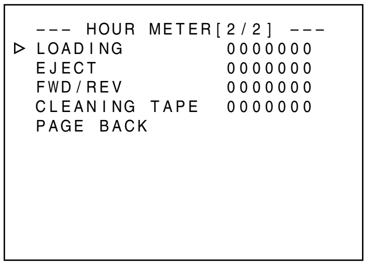
1.5.10 HOUR METER

In a service menu, place the cursor on “HOUR METER ” and push the SHUTTER dial to display the HOUR METER menu.



```
--- HOUR METER[1/2] ---
▷ DRUM              CLEAR
  TOTAL DRUM        000000H
  FAN               000000H
  POWER             000000H
  CAPSTAN           000000H
  SEACH             000H00M
  FF/REW            000H00M
  NEXT PAGE
  PAGE BACK
```

Fig. 1-5-10 (1)



```
--- HOUR METER[2/2] ---
▷ LOADING           0000000
  EJECT             0000000
  FWD/REV           0000000
  CLEANING TAPE     0000000
  PAGE BACK
```

Fig. 1-5-10 (2)

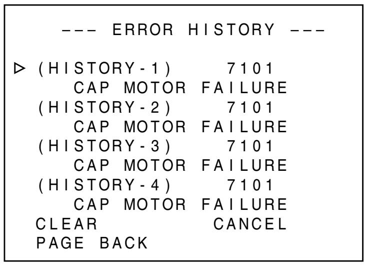
Operation ways are almost same as CAMERA 1 menu, so please refer it.

Item	Parameter	
DRUM	000000	Displays the drum hour meter(maintenance for drum)
	CLEAR	Resets the drum hour meter.
TOTAL DRUM	000000	Displays the total hour meter.
	CLEAR	Resets the total drum hour meter. (This does not work unless the special setting)
FAN	000000	Displays the fan hour meter.
	CLEAR	Resets the fan hour meter.
POWER	000000	Displays the power hour meter.
	CLEAR	Resets the power hour meter.
CAPSTAN	000000	Displays the capstan hour meter.
	CLEAR	Resets the capstan hour meter.
SEARCH	000000	Displays the search hour meter.
	CLEAR	Resets the search hour meter.
FF/REV	000000	Displays the FF/REW hour meter.
	CLEAR	Resets the FF/REW hour meter.
LOADING	000000	Displays the loading count.
	CLEAR	Resets the loading count.
EJECT	000000	Displays the eject count.
	CLEAR	Resets the eject count.
FWD/REV	000000	Displays the forward/reverse switching count.
	CLEAR	Resets the forward/reverse switching count.
CLEANING TAPE	000000	Displays the cleaning tape working count.
	CLEAR	Resets the cleaning tape working count.

Table 1-5-10

1.5.11 ERROR HISTORY

In a service menu, place the cursor on “ERROR HISTORY ” and push the SHUTTER dial to display the ERROR HISTORY menu.



```
   --- ERROR HISTORY ---

▷ (HISTORY-1)     7101
     CAP MOTOR FAILURE
  (HISTORY-2)     7101
     CAP MOTOR FAILURE
  (HISTORY-3)     7101
     CAP MOTOR FAILURE
  (HISTORY-4)     7101
     CAP MOTOR FAILURE
  CLEAR          CANCEL
  PAGE BACK
```

Fig. 1-5-11

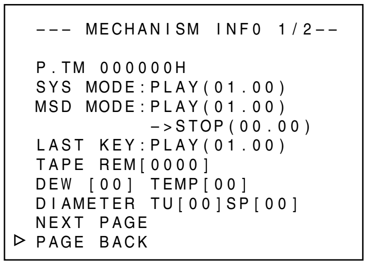
(1) Rotate the SHUTTER dial to move the cursor onto the item to show details.
(2) Push the SHUTTER dial so that the details of ERROR HISTORY is shown.
(3) Rotate the SHUTTER dial to move cursor onto the “CLEAR”, push the SHUTTER dial, then ERROR HISTORY will be deleted.

Note :

ERROR HISTORY was stored from “HISTORY-1” box to “HISTORY-4”box. Latest error was stored “HISTORY-4” box, and if there will be occur another error then latest error history will be rewrite on “HISTORY-4”. From “HISTORY-1” to “HISTORY-3” will not rewrite, except to “CLEAR” operation.

1.5.12 Detail indication of ERROR HISTORY

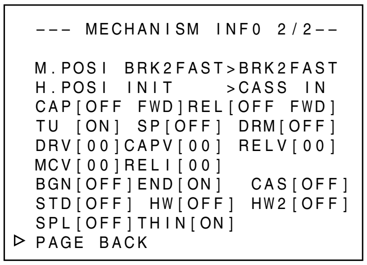
In a ERROR HISTORY display, place a cursor onto the item and push SHUTTER dial, then detail display (MECHANISM INFO) picture will be shown.
MECHANISM INFO has 2 pages.



```
  --- MECHANISM INFO 1/2--

  P.TM 000000H
  SYS MODE:PLAY(01.00)
  MSD MODE:PLAY(01.00)
          ->STOP(00.00)
  LAST KEY:PLAY(01.00)
  TAPE REM[0000]
  DEW [00] TEMP[00]
  DIAMETER TU[00]SP[00]
  NEXT PAGE
▷ PAGE BACK
```

Fig. 1-5-12 (1)



```
  --- MECHANISM INFO 2/2--

  M.POSI BRK2FAST>BRK2FAST
  H.POSI INIT    >CASS IN
  CAP[OFF FWD]REL[OFF FWD]
  TU [ON] SP[OFF] DRM[OFF]
  DRV[00]CAPV[00] RELV[00]
  MCV[00]RELI[00]
  BGN[OFF]END[ON]  CAS[OFF]
  STD[OFF] HW[OFF] HW2[OFF]
  SPL[OFF]THIN[ON]
▷ PAGE BACK
```

Fig. 1-5-12 (2)

Item	Content	Displayed Content
P.TM	POWER HOUR METER	Power hour meter is displayed.
SYS MODE	SYSCON CPU mode when error occurred PLAY (03, 00) ⇧ ⇧ MODE DATA Parameter	SFF/SREW parameter is speed display. (Refer to Table 1-9-11 (2) Speed parameter) Parameters of other modes are irrelevant. EJECT (01) : Eject STOP (02) : Stop PLAY (03) : Play REC (13) : Rec STL (04) : Still RECP (14) : Rec Pause FF (05) : FF DVRC (15) : DV Rec REW (06) : Rew DVRP (16) : DV Rec Pause SFF (07) : Search Fwd POFF (1A) : Power Off SREW (08) : Search Rev NDEF (1F) : During initial operation SFF/SREW parameter is speed display (See Table 1-9-11 (2))
MSD MODE	MSD CPU mode and target mode when error occurred PLAY (01, 00) ⇧ ⇧ MODE DATA Parameter	
LAST KEY	Final Key code when error occurred PLAY (E7, 01) ⇧ ⇧ MODE DATA Parameter	Other parameters are 01: ON, 00: OFF REC (E0) : Rec SFF (EB) : Search Fwd RECP (E1) : Rec Pause SREW (EC) : Search Rev DVRP (E2) : DV Rec Pause STOP (F0) : Stop ADUB (E5) : Audio Dub EJECT (F1) : Eject ADBP (E6) : Audio Dub Pause HWUP (F2) : Housing Up PLAY (E7) : Play HWDN (F3) : Housing Down STL (E8) : Still POFF (F4) : Power Off FF (E9) : FF DVRC (F5) : DV Rec REW (EA) : Rew PON (FA) : Power on
TAPE REM	TAPE REMAIN	Displays tape remaining in minutes ([FFFF] : not detected)
DEW	DEW sensor A/D intake value	DEW display at over [48]
TEMP	Temperature sensor A/D intake value The value "49" [5°C] is threshold of detecting low temperture. The value "DC" [60°C] is the threshold of displaying "OVER HEATING" message.	Temperature is displayed in hexadecimal value. -10°C ➡ [22] 20°C ➡ [7C] 50°C ➡ [CC] - 5°C ➡ [2D] 25°C ➡ [8C] 55°C ➡ [D4] 0°C ➡ [3A] 30°C ➡ [9C] 60°C ➡ [DC] 5°C ➡ [49] 35°C ➡ [AA] "OVER HEATING" message 10°C ➡ [59] 40°C ➡ [B7] 65°C ➡ [E1] 15°C ➡ [6A] 45°C ➡ [C2] 70°C ➡ [E6]
DIAMETER	Displays wound tape diameter (Take-up, Supply)	[00]—[FF] : 0mm-82mm (Diameter) ([00] is non-detected)
M. POSI	Mechanism position and target mechanism position	[2EJ], [EJ], [EJ2CAIN], [CAIN], [CAIN2HLD], [HLD], [HLD2REV], [REV], [REV2FWD], [FWD], [FWD2STP], [STP], [STP2], [CLNOFF], [INIT]
CAP	Capstan status	[ON] : Rotate [FWD/REV]: Direction display [OFF] : Stop
REL	Reel status	[ON] : Rotate [FWD/REV]: Direction display [OFF] : Stop
DRM	Drum status	[ON] : Rotate [OFF] : Stop
DIR	Direction of tape running (Direction of target)	[FWD/REV]: Direction display
DRV	Drum control voltage	[00-FF] : 0—3V
CAPV	Capstan control voltage	[00-FF] : 0—3V
RELV	Reel control torque value	[00-FF] : 0—3A

Item	Content	Displayed Content
MCV/SPD	Loading/cassette housing control voltage (when error code 4xxx and error code 3xxx is displayed.)	[00-FF] : 0—8V (Displays mode motor control voltage during error code 3xxx) (Displays cassette motor control voltage during error code 4xxx)
	Tape speed (When the code excepting error code 4xxx and error code 3xxx is displayed.)	[00-FA] : 0—25X (FF is displayed when the speed is faster than this.) "Tape speed" is a function to convert the hexadecimal value into a decimal value, and no speed parameter of the tape. (ex. FAh = 250 → The speed is 25.0X.)
RELI	Reel current (Cassette housing motor current only during housing-related warning)	[00-FF] : 0—1.2A
BGN	Begin sensor	[ON] : Leader tape detected [OFF] : Magnetic tape detected
END	End sensor	[ON] : Trailer tape detected [OFF] : Magnetic tape detected
CAS	Cassette SW status	[ON] : No cassette [OFF] : Cassette detected
THIN	Thin tape detection	[ON] : THIN [OFF] : NORMAL

Table 1-5-12 (1) MECHANISM INFO content

Parameter	Speed
BD	+ 8.5
A9	+ 5.5
91	+ 2.5
80	+ 1
81	− 1.5
91	− 2.5
A9	− 4.5
BD	− 6.5

Table 1.5.12 (2) HDV Speed parameter

Parameter	Speed	Parameter	Speed
00	x 0	82	x 1.08
1F	x 0.03	83	x 1.11
40	x 0.10	84	x 1.12
53	x 0.20	85	x 1.16
61	x 0.30	91	x 2.00
6D	x 0.50	A9	x 5.00
7A	x 0.80	BD	x 9.00
7B	x 0.84	C0	x 10.0
7D	x 0.90		
7F	x 0.96		
80	x 1.00		
81	x 1.04		

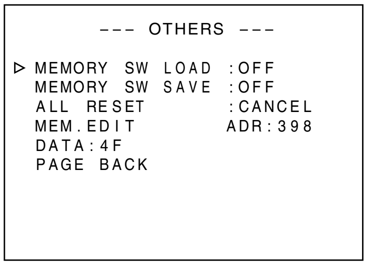
Table 1-5-12 (3) DV Speed parameter

Error code	Display	Content of occurrence	Method of detection	Detected signal
0201	CONDENSATION ON DRUM	DEW detected	If DEW sensor detects condensation	IC71 (MSD) –detects voltage of pin E16
3200	LOADING FAILURE	Does not load	If mechanism position does not move in loading direction within 5 seconds	IC71 (MSD) –detects output of pin F14, rotary encoder
3300	UNLOADING FAILURE	Does not unload	If mechanism position does not move in unloading direction within 5 seconds	IC71 (MSD) –detects output of pin F14, rotary encoder
	No display	Does not intake	If intake is not completed within 5 seconds (Ejects without warning)	IC71 (MSD) –pin M9, CASSETTE SW is not detected within 5 seconds
4100	CASSETTE EJECT FAILURE	Does not eject	If eject is not completed within 5 seconds	IC71 (MSD) –pin P9, HOUSING SW is not detected within 5 seconds
5605	DEFECTIVE TAPE	Tape abnormality during intake	If begin or end side sensor is ON after intake	IC71 (MSD) –pin E15, START sensor and pin E14, END sensor are both detected
5606	DEFECTIVE TAPE	Tape tear during unloading	If reel FG is excessive during unloading	IC71 (MSD) –pin R14, TU REEL FG is detected
5607	DEFECTIVE TAPE	Tape tear during loading	If reel FG is insufficient during loading	IC71 (MSD) –pin R14, TU REEL FG is detected
5608	DEFECTIVE TAPE	Tape tear on the loading side	If only supply side reel does not rotate during FWD/REV	IC71 (MSD) –pin R13, SUP REEL FG is not detected
5609	DEFECTIVE TAPE	Tape tear during slack takeup	If tape slack takeup is not completed within 10 seconds	IC71 (MSD) –pin R14, TU REEL FG and pin R13, SUP REEL FG are both detected
5702	TAPE END DET. ERROR	End sensor abnormality	If trailer tape sending is not completed within 3 seconds	IC71 (MSD) –pin E14, END sensor is detected for over 3 seconds
5802	TAPE BEGIN DET. ERROR	Begin sensor abnormality	If leader tape sending is not completed within 3 seconds	IC71 (MSD) –pin E15, START sensor is detected for over 3 seconds
7001	DRUM MOTOR FAILURE	Drum motor does not rotate	If drum motor does not rotate for over 4 seconds	IC71 (MSD) –pin T14, DRUM FG is not detected for over 4 seconds
7101	CAP MOTOR FAILURE	Capstan motor does not rotate	If capstan motor does not rotate for over 2 seconds	IC71 (MSD) –pin T13, CAP FG is not detected for over 2 seconds
7202	SUPPLY REEL FAILURE	SUP reel does not rotate	If SUP reel does not rotate for over 3 seconds	IC71 (MSD) –pin R13, SUP REEL FG is not detected for over 3 seconds
7203	SUPPLY REEL FAILURE	SUP side tape slack	If only SUP reel does not rotate during REV	IC71 (MSD) –pin R13, SUP REEL FG is not detected
7302	TAKE UP REEL FAILURE	TU reel does not rotate	If TU reel does not rotate for over 3 seconds	IC71 (MSD) –pin R14, TU REEL FG is not detected for over 3 seconds
7303	TAKE UP REEL FAILURE	TU side tape slack	If only TU reel does not rotate during FWD	IC71 (MSD) –pin R14, TU REEL FG is not detected
7305	TAKE UP REEL FAILURE	Tape slack during unloading	If TU reel FG is insufficient during unloading	IC71 (MSD) –pin R14, TU REEL sensor is detected

Table 1-5-12 (4) Error Code Contents

1.5.13 OTHERS menu

In a service menu, place the cursor on “OTHERS” and push the SHUTTER dial to display the OTHERS menu.



```
      --- OTHERS ---

▷ MEMORY SW LOAD :OFF
  MEMORY SW SAVE :OFF
  ALL RESET      :CANCEL
  MEM.EDIT       ADR:398
  DATA:4F
  PAGE BACK
```

Fig. 1-5-13

Operation ways are almost same as CAMERA1 MENU, so please refer it.

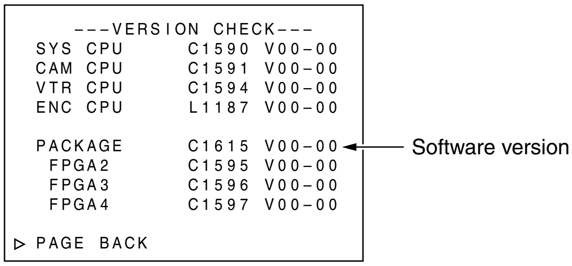
Item	Parameter	
MEMORY SW LOAD	OFF	Standard setting
	START	Menu SW information is loaded from a store area.
MEMORY SW SAVE	OFF	Standard setting
	START	Menu SW information is saved to a store area.
ALL RESET	CANCEL	Standard setting
	EXECUTE	Resets all EEP-ROM data to default settings except adjustment data, hour meter data, and IEEE1394 ID data. Default settings at time of shipment differ by market region. I: for Japan, U: for USA, E: for EU, EC: for China
MEM.EDIT	Contents of the EEP-ROM can be edited directly ADR: Address (0x000-0x7DF) display DATA: Display of data embedded in address shown by ADR **Operation procedure** 1. Rotate the SHUTTER dial to move the cursor to MEM.EDIT. 2. Push the SHUTTER dial to blink the “ADR” parameter. 3. Then rotate the SHUTTER dial to adjust the specified value. 4. Next, push the SHUTTER dial to blink the DATA parameter. 5. Rotate the SHUTTER dial to adjust the specified value. 6. Finally, push the SHUTTER dial to store the data. **(NOTE)** Data that is crucial for the system is stored in the EEP-ROM, and making unadvised changes to it can cause the unit to stop operating correctly. Please do not use anything other than the IEEE1394 ID setting.	

(☐ is default setting when shipped from factory)

Table 1-5-13 OTHERS Menu Setting Items List

1.5.14 CPU version menu

Displays version of SYSCON CPU, Camera CPU , VTR CPU, ENC CPU, PACKAGE, FPGA2, FPGA3 and FPGA4.



```
   ---VERSION CHECK---
 SYS CPU      C1590 V00-00
 CAM CPU      C1591 V00-00
 VTR CPU      C1594 V00-00
 ENC CPU      L1187 V00-00

 PACKAGE      C1615 V00-00
  FPGA2       C1595 V00-00
  FPGA3       C1596 V00-00
  FPGA4       C1597 V00-00

▷ PAGE BACK
```

Fig. 1-5-14 CPU Version

1.5.15 EEP-ROM

(1) EEP-ROM and maintenance data

GY-HD100 is equipped with three EEP-ROMS for the purpose of data maintenance, and their contents are as per the following list. When the circuit board or EEP-ROM is replaced, there will be no data in the EEP-ROM. When the unit is powered up, and the SYSCON CPU recognizes that there is no data in the EEP-ROM, it automatically writes initial data into the EEP-ROM to initialize it. The memory data shown in Table 1-5-15 will all be reset back to default settings, so it will be necessary to perform necessary adjustments and settings again.

EEP-ROM	Board name	Memory data content
IC70	MAIN board (MSD CPU)	• Adjusted data (DVC section) • IEEE1394 ID data • HOUR METER data
IC57	MAIN board (Camera CPU)	• Blemish data
IC61	MIF board (SYSCON CPU)	• Adjusted data (Camera section) • User menu and Service menu settings data • ERROR HISTORY

Table 1-5-15 EEP-ROM Memory Data Content

(2) IEEE1394 ID setting method

IEEE1394 equipped units have an ID, as defined by the IEEE1394 standard, stored in the internal EEP-ROM (IC 70. At the time of production, the ID numbers allotted to each individual unit are written into the unit's memory, and a sticker bearing the ID is affixed inside the unit. When the EEP-ROM or MAIN circuit board is replaced, the ID needs to be set again.

Procedure for setting IEEE1394 ID

The ID is an 8 digit, hexadecimal code, with 1 high-end Byte being the model code, and 3 low-end Bytes being unique to the unit. The model code is automatically initialized, so only the lower 3 Bytes of unique code need to be set manually. Go from Service Menu → OTHERS Menu → MEM. EDIT (Memory Edit) to select the address in the ID data section and make the setting directly. The 3 low-end Byte address is as follows. Make the setting while confirming the ID printed on the label (GY-HD100U/E ID: 4Fxxxxxx, GY-HD101E ID: 4Exxxxxx) pasted on the inside of the GY-HD100 (See Fig. 1-5-15).

IEEE1394 ID data : 4F xx xx xx (Indicates on the label of GY-HD100 inside.)
⇩ ⇩ ⇩
MEMORY Address number "391" "392" "393" (Each 1 Byte ID data are stored for every one Memory Address number.)

Setting procedure

(1) Rotate the SHUTTER dial to move the cursor to MEM. EDIT.
(2) Push the SHUTTER dial to make the ADR parameter blink.
(3) Select ADR parameter "391".
(4) Push the SHUTTER dial to make the DATA parameter blink.
(5) Rotate the SHUTTER dial to set the ID data for ADR = "391".
(6) Push the SHUTTER dial to confirm the DATA parameter.
(7) In the same manner, select ADR parameter "392" and "393" to set the ID data.

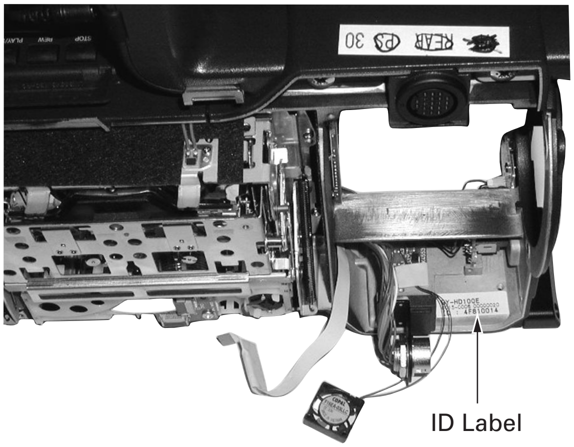


Fig. 1-5-15 ID Label Attachment Position

1.6 HOW TO UPDATE FIRMWARE

Note :

- When replacing MIF board or MAIN board, firmware update is essential.
- Do not turn the power off during the update, otherwise CPU may be destroyed and replacement of CPU or board will be required.
- Under the battery operation firmware update can not be allowed, use the AC adapter.
- When update is failed audio AUTO LED's are flashing alternately. In this case try again after removing SD memory card.
- Remove the IEEE1394 cable, otherwise it may cause some troubles on GY-HD100.
- Do not format the SD memory card by PC.
  The SD memory card formatted by PC will not work correctly due to wrong formatting. In this case format the SD memory card on GY-HD100.
  You can also format the SD memory card using the general digital still camera equipped SD memory card slot, or formatting software supplied from SD memory card manufacturer such as Pnasonic.

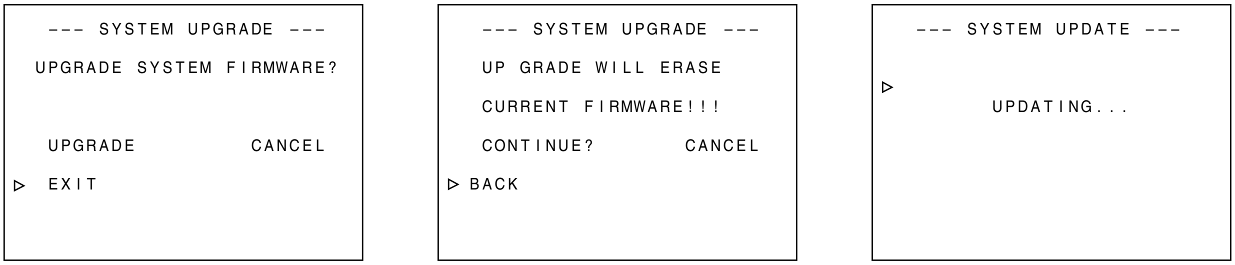
1.6.1 Preparation (Copy firmware to SD memory card)

Note: 32MB - 512 MB of Panasonic SD memory card is recommended.

(1) Download the update file from JS-NET and unzip it to a PC.
(2) Insert the SD memory card to the PC and confirm that no file is in the SD memory card. If there are some files, delete them.
(3) Copy the unzipped update file(s) to the SD memory card.

1.6.2 Update procedure

(1) Eject and take out the cassette if loaded, and close the cassette cover.
(2) While pressing USER2 and USER3 buttons, turn on the power. Both HDV and DV LED will turn on a light.
(3) Insert the SD memory card to the card slot of GY-HD100.
(4) Rotate the SHUTTER dial, move the cursor to UPGRADE and press SHUTTER dial.
(5) Rotate the SHUTTER dial, select EXECUTE and press SHUTTER dial.
(6) Rotate the SHUTTER dial, move the cursor to CONTINUE? and press SHUTTER dial.
(7) Rotate the SHUTTER dial, select EXECUTE and press SHUTTER dial.



```
--- SYSTEM UPGRADE ---
 UPGRADE SYSTEM FIRMWARE?

  UPGRADE         CANCEL
▷ EXIT
```

```
--- SYSTEM UPGRADE ---
 UP GRADE WILL ERASE
 CURRENT FIRMWARE!!!
 CONTINUE?        CANCEL
▷ BACK
```

```
--- SYSTEM UPDATE ---

▷
        UPDATING...
```

Fig.1.6.2 SYSTEM UPDATE Menu Screen

(8) When update is completed, audio AUTO LED's of AUDIO CH-1 and CH-2 are blinking slowly. It will take about seven minutes to complete.
(9) Remove the SD memory card, then GY-HD100 will reboot automatically.
(10) Turn off the power and turn on again.
(11) Enter the Service Menu to check CPU VERSION.

SECTION 2
MECHANICAL ADJUSTMENTS

2.1 BEFORE ADJUSTMENTS

2.1.1 Precautions

1) Be sure to apply a screw securing torque when attaching a part.
   The securing torque should be 0.04 N-m (0.4 kgf-cm) unless otherwise specified.
2) Always unplug the power cord of the set before attaching, removing or soldering a part.
3) When unplugging a connector, do not pull the wire but grasp the connector body.
4) Do not make an adjustment or rotate a potentiometer blindly while the source of trouble is not identified.
5) Before adjusting electrical circuitry, be sure to wait for more than 10 minutes after turning the power on.

2.1.2 Measuring instruments required for adjustments

Instrument	Condition
Oscilloscope	Calibrated instrument with measuring bandwidth of 100 MHz or more.

Table 2-1-1

2.1.3 Equipment required for adjustments

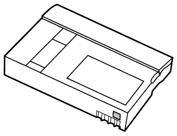
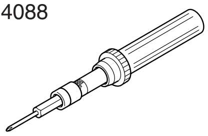
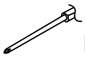
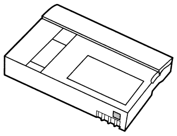
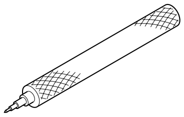
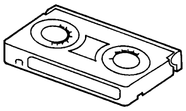
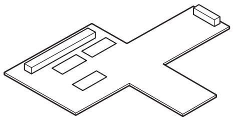
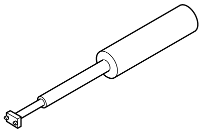
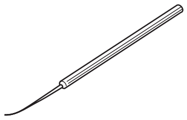
1	Alignment tape	5	Torque screwdriver
MC-1 (NTSC) MC-2 (PAL)		YTU94088 	YTU94088-003  Replaceable bit (long type)
2	DV tape	6	Slit washer attaching tool
For use in self-recording/playback. (M-DV 63PRO BU)		YTU94121A	
3	Cassette torque meter	7	Connector board (REWRITE PWB)
YTU94150A (or YTU94151A)		CK453800C	
4	Guide screwdriver	8	Chip IC replacement tool
YTU94085		PTS40844-2	

Table 2-1-2

2.2 BASICS OF MECHANISM DISASSAMBLY/ASSEMBLY

2.2.1 Assembly mode

The disassembly and assembly of the mechanism can be done in the ASSEMBLY mode (see Table 2-2-1).
The ASSEMBLY mode is provided in the intermediate position between C-IN and Harf LOAD. As the C-IN (Cassette IN) mode is usually set when a cassette tape is ejected, the ASSEMBLY mode should be entered after entering the C-IN mode.

There are 2 ways to set to ASSEMBLY mode as shown below:

1) Apply DC 3 V to the motor.
2) Remove the motor from the bracket (Gear cover) and turn the wheel gear 2 using screwdriver.

As shown in Fig. 2-2-1, the ASSEMBLY mode position refers to where the hole position of 7 cm component matches the hole position of the main deck.

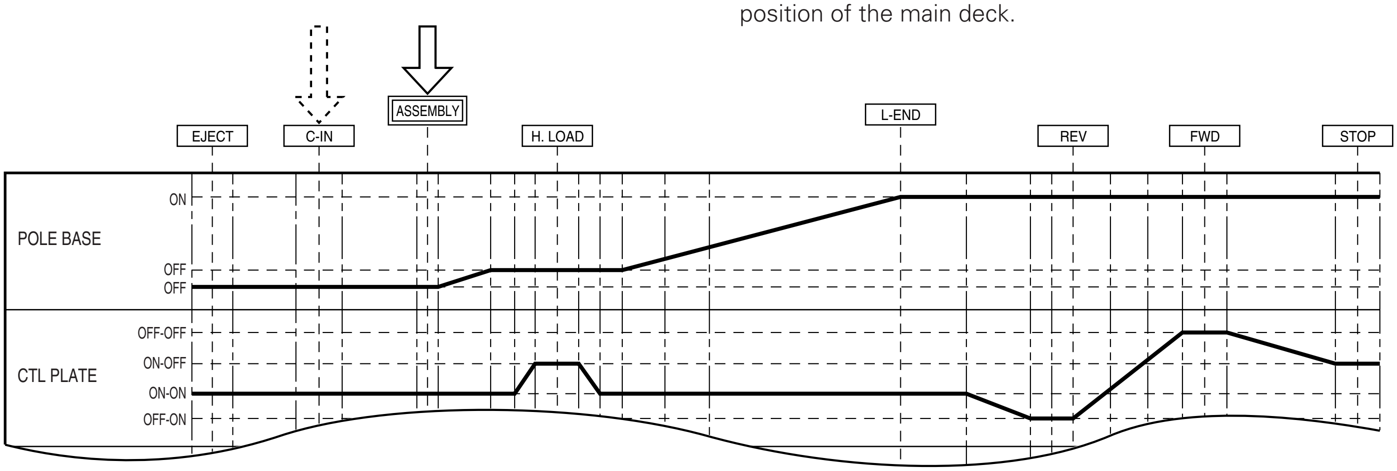
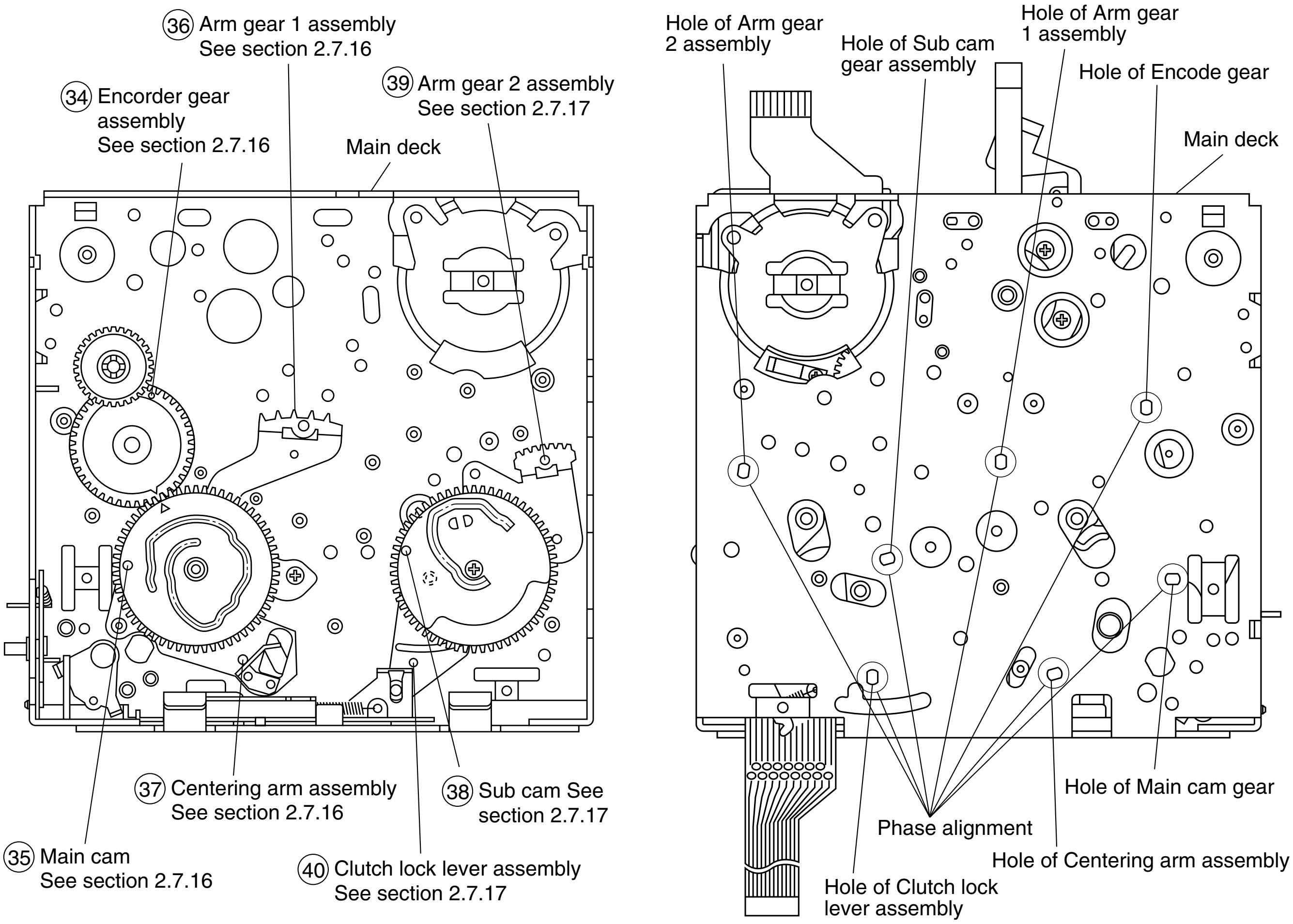


Table 2-2-1


㊱ Arm gear 1 assembly See section 2.7.16
㉞ Encorder gear assembly See section 2.7.16
㊴ Arm gear 2 assembly See section 2.7.17
Main deck
㊲ Centering arm assembly See section 2.7.16
㊳ Sub cam See section 2.7.17
㉟ Main cam See section 2.7.16
㊵ Clutch lock lever assembly See section 2.7.17
Hole of Arm gear 2 assembly
Hole of Sub cam gear assembly
Hole of Arm gear 1 assembly
Hole of Encode gear
Main deck
Hole of Main cam gear
Phase alignment
Hole of Centering arm assembly
Hole of Clutch lock lever assembly

— Top view —

— Bottom view —

Fig. 2-2-1

2.3 MECHANISM TIMING CHART

See following table (Table 2-3-1).

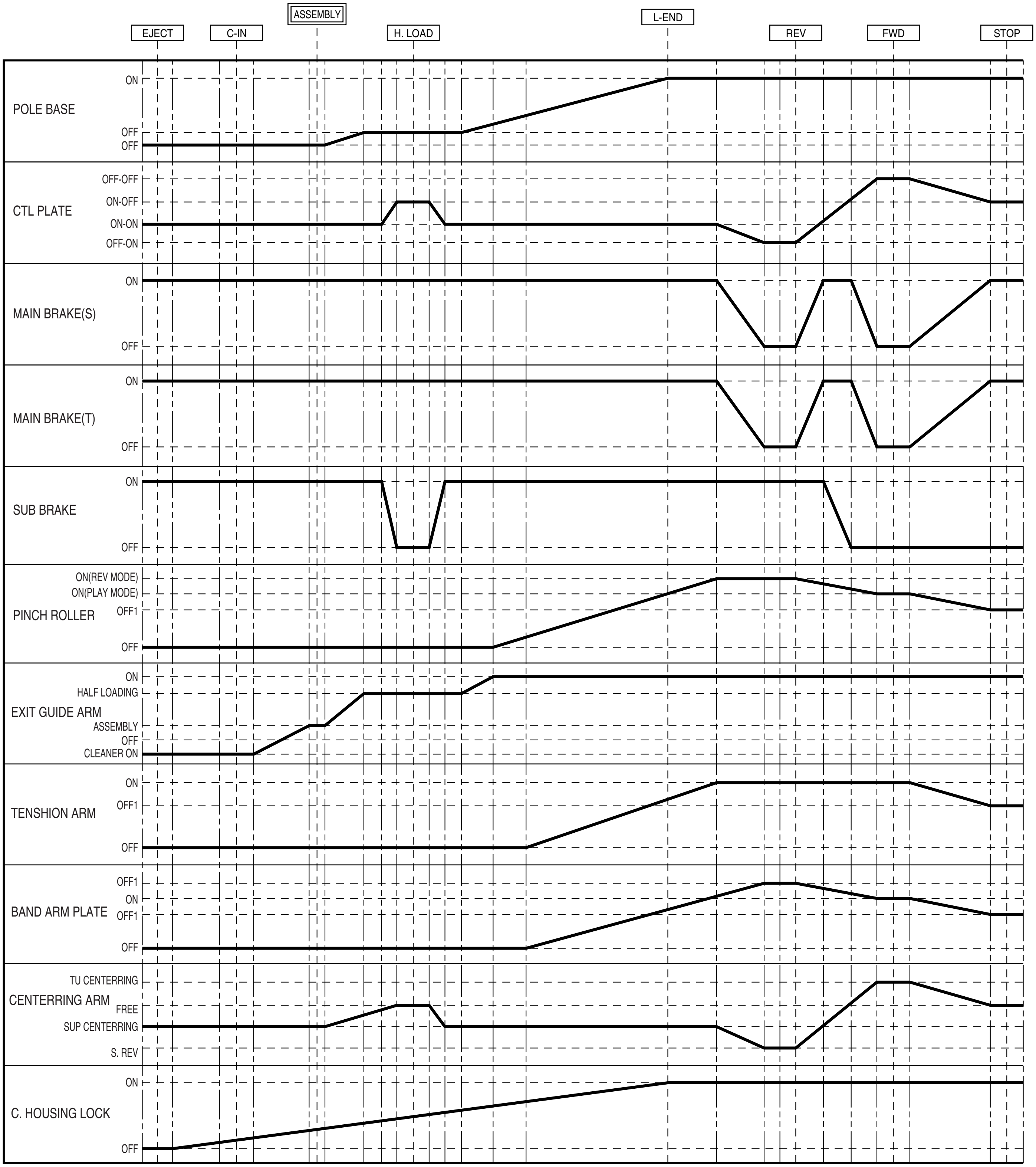


Table 2-3-1

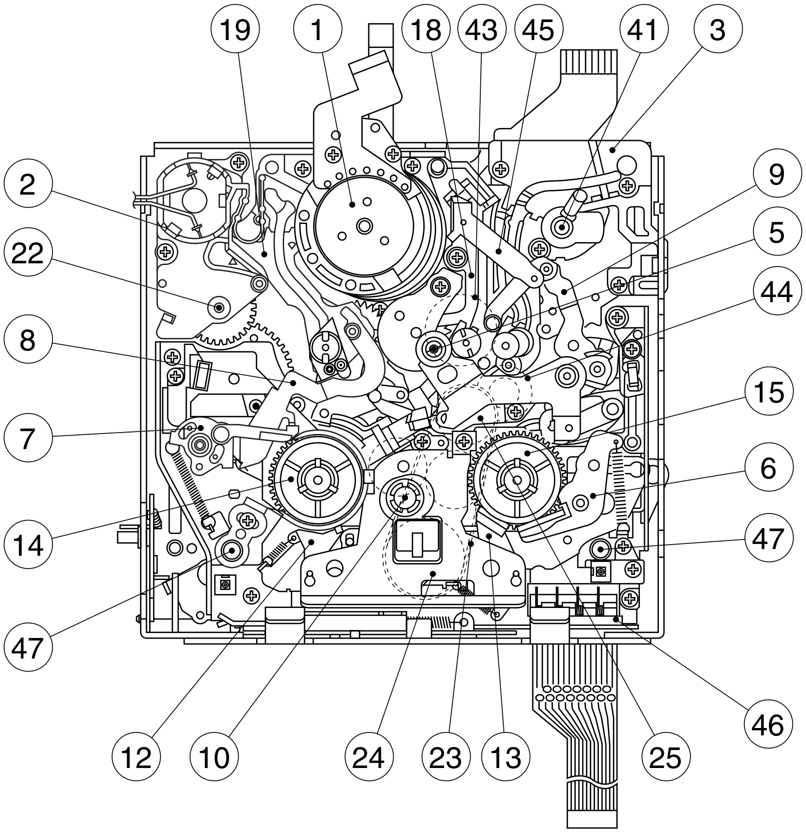
2.4 MAINTENANCE AND INSPECTION OF MAJOR PARTS

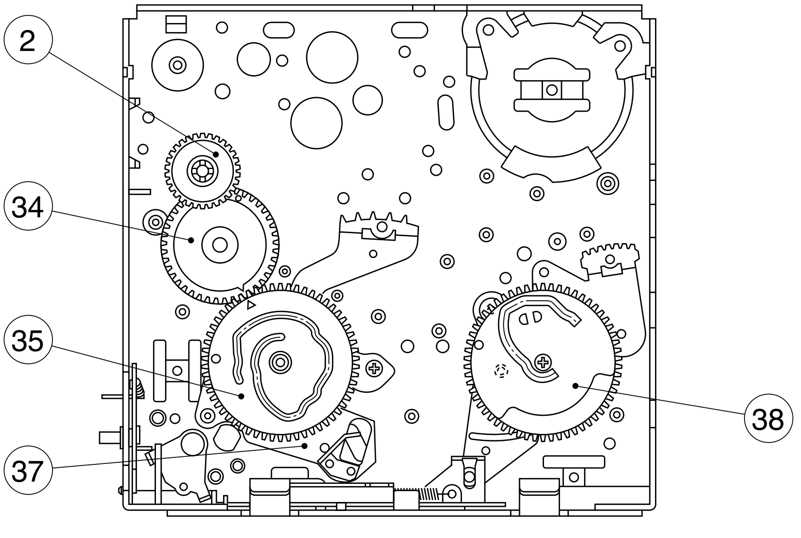
Periodical inspection and maintenance are requisite to maintain the initial performance and reliability of the product. Table 2-4-1 (Maintenance & Inspection List) has been compiled assuming standard operating conditions, and the specifications in the table are greatly variable depending on the actual operating environment and conditions. Remember that, if the maintenance and inspection are not enforced properly, the operating hours of the product will not only reduce considerably but other unfavorable influences may produce.

Rubber parts may deform or degrade after long period of storage even if they are not used in this period.

The service life of the drum is variable depending on the tape used and operating environment.

2.4.1 Layout of major parts





2.4.2 Maintenance and inspection list

1) The 6000 H maintenance consists of a replacement of the entire mechanism assembly.
2) When mounting the capstan motor on the main deck, control of the verticality is required. Therefore, when the capstan motor reaches the end of its service life, the entire mechanism assembly should be replaced.

	Part Name	Symbol No.	Operating Hours (DRUM Hour Meter)												Ref.
			500	1000	1500	2000	2500	3000	3500	4000	4500	5000	5500	6000	
1	Tape transport parts		★	★	★	★	★	★	★	★	★	★	★		—
2	② Gear cover assembly	M 8 46	★	○★	★	●	★	○★	★	●	★	○★	★		2.7.14
3	⑧ Tension arm assembly	M 8 40	★	○★	★	●	★	○★	★	●	★	○★	★		2.7.8
4	⑲ Guide rail (S) assembly	M 8 22	★	○★	★	●	★	○★	★	●	★	○★	★		2.7.12
5	⑱ Guide rail (T) assembly	M 8 23	★	○★	★	●	★	○★	★	●	★	○★	★		2.7.12
6	③ Middle catcher assembly	M 8 24	★	○★	★	●	★	○★	★	●	★	○★	★		2.7.5
7	㊶ Capstan shaft	M 8 4	★	★	★	★	★	★	★	★	★	★	★		—
8	⑤ Pinch roller arm assembly	M 8 44	★	○★	★	●	★	○★	★	●	★	○★	★		2.7.3
9	⑨ Exit guide arm assembly	M 8 43	★	○★	★	●	★	○★	★	●	★	○★	★		2.7.4
10	① Drum assembly	M 8 50	○★	○★	★	●	★	○★	○★	●	★	○★	○★		2.7.2
11	㊶ Capstan motor	M 8 4						○	○	○	○	○	○	●	—
12	㉕ Reel drive pulley assembly	M 8 33		○△		●△		○△		●△		○△			2.7.15
13	㊸ R.drive gear 1	M 8 47		○△		●△		○△		●△		○△			2.7.15
14	㊹ R.drive gear 2	M 8 48		○△		●△		○△		●△		○△			2.7.15
15	㉔ Center gear assembly	M 8 34		○△		●△		○△		●△		○△			2.7.14
16	㉓ Timing belt	M 8 11		○		●		○		●		○			2.7.14
18	⑥ Sub-brake assembly	M 8 36		○		●		○		●		○			2.7.10
19	⑫ Main brake (S) assembly	M 8 38		○		○		○		○		○			2.7.10
20	⑬ Main brake (T) assembly	M 8 37		○		●		○		●		○			2.7.10
21	⑭ ⑮ Reel disk assemblies	M 8 39		○		●△		○		●△		○			2.7.11
22	⑦ Band arm plate assembly	M 8 41		○		●		○		●		○			2.7.8
23	⑩ Swing arm assembly	M 8 42		○		●		○		●		○			2.7.7
24	㉒ Wheel gear-2	M 8 3		○		●		○		●		○			2.7.2
25	㉞ Encoder gear	M 8 21		○		●		○		●		○			2.7.18
26	㊲ Centering arm assembly	M 8 26		○		●		○		●		○			2.7.18
27	㉟ Min cam	M 8 8		○		●		○		●		○			2.7.18
28	㊳ Sub cam	M 8 9		○		●		○		●		○			2.7.19
29	㊺ Cleaner arm assembly	M 8 43	○	●	○	●	○	●	○	●	○	●	○		2.7.4
30	㊼ Cassette guide pin (Sub deck)	M 8 35	★	★	★	★	★	★	★	★	★	★	★		—
31	㊻ MIC contact (Sub deck)	M 8 35	★	★	★	★	★	★	★	★	★	★	★		—
32	Mechanism assembly (including cassette housing assembly)	M 8 1												●	—
33	FAN motor	M 2 43												●	—

★: Clean with ethanol. ○: Check and replace if required. ●: Replace. △: Oil the shaft.
After replacing a part, apply lubricant to the required points.

Table 2-4-1

2.4.3 Cleaning

The mechanism incorporates a video head cleaner that is effective for the removal of magnetic dust, etc. However, tape lubricant adhering to the head surface produces a spacing loss, it is recommended to polish the heads using a head cleaning tape. When the video heads become soiled an increase in the error rate results. Eventually, when the error rate increase is too much to be corrected by the error correction circuit, block noise will be observed in the picture.

1) Cleaning the video heads
Use the DVC cleaning cassette for cleaning the video heads. Always be sure to use the cleaning cassette, Part No. M-DV12CLAUX.
The video heads should be cleaned periodically. Moreover, care should be taken about the operating environment as the tape running time standard varies accordingly. Please refer to "Precautions for Use of Head Cleaning Tape" in the instructions.

Caution

- **As the DVC cleaning tape has a much higher lapping effect than VHS cleaning tapes, frequent use of the DVC cleaning tape will reduce the head service life. Do not play the DVC cleaning tape for more than 10 seconds per run or for more than 4 times per cleaning session.**
- **The cleaning tape can be used effectively for up to about 4 passes. It cannot improve the cleaning effect even if it is run for more than 4 times.**

2) Cleaning the upper/lower drums
Use a cleaning cloth or high-quality paper sheet to clean the upper drum. Moisten the cloth or paper sheet with a small amount of ethyl alcohol, apply it lightly against the upper drum while turning it by hand.
After this operation, wipe it with a dry cloth or paper sheet without alcohol. Be sure to play the cleaning tape to its end. The lower drum tends to gather magnetic dust, etc. in its lead section, and linearity cannot be achieved if this becomes excessively dirty. The tape inlet and outlet areas are contaminated particularly easily, causing trouble such as dropout in FM signal reproduction, block noise on one side of a monitored picture, absence of audio output or incapability of time code readout. To clean the lead section, use a toothpick and rub lightly along the lead section. Be careful not to scratch the video head when this is done.

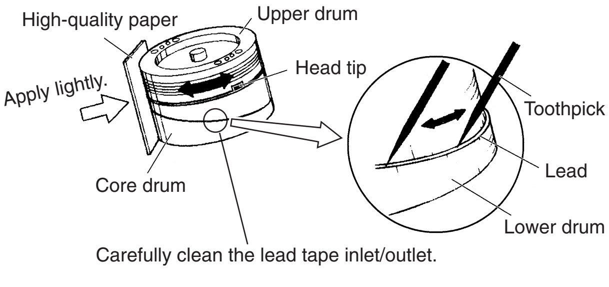


Fig. 2-4-1

3) Cleaning the tape transport system
Moisten the tip of a cotton swab with alcohol and use it to clean the tape transport parts. Take special care of the TU/SUP guide roller flanges and the rear sides of the inclined poles, as these are the parts that most frequently collect magnetic dust.

Caution

Do not wipe the capstan shafts using alcohol. Otherwise, the oil in the bearings may be diluted by the alcohol and become attached to the tape.

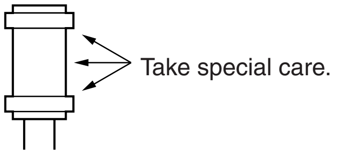


Fig. 2-4-2 Guide Roller

2.4.4 Oiling and greasing

Table 2-4-2 shows the oil and greases used with the set.

Classification	Name	Part No.
Oil	Cosmo Hydro HV100	YTU94027
Grease	Maltemp SH-P	KYODO-SH-P
	Hanal	RX-410R

Table 2-4-2

1) Oiling should be performed periodically. Oil the shafts by referring to the maintenance table.
2) After replacing a part, grease the required points. For the parts to be greased see the exploded diagram in chapter 5, "DISASSEMBLY DRAWINGS AND PARTS LIST".
3) As Hanal separates over time, be sure to mix it (shake) well before use.
4) Take care not to leave grease or oil on the tape transport parts which come into contact with the tape or on the brake pads.
5) Take care not to apply too much oil or grease. The standard oiling quantity is one drop and the standard greasing quantity is the quantity with which the grease does not overflow.

2.5 PERIODICAL MAINTENANCE

Perform maintenance at the correct times in accordance with the maintenance table.
Fig. 2-5-1 shows the flow chart of periodical maintenance procedures at different operating hours.

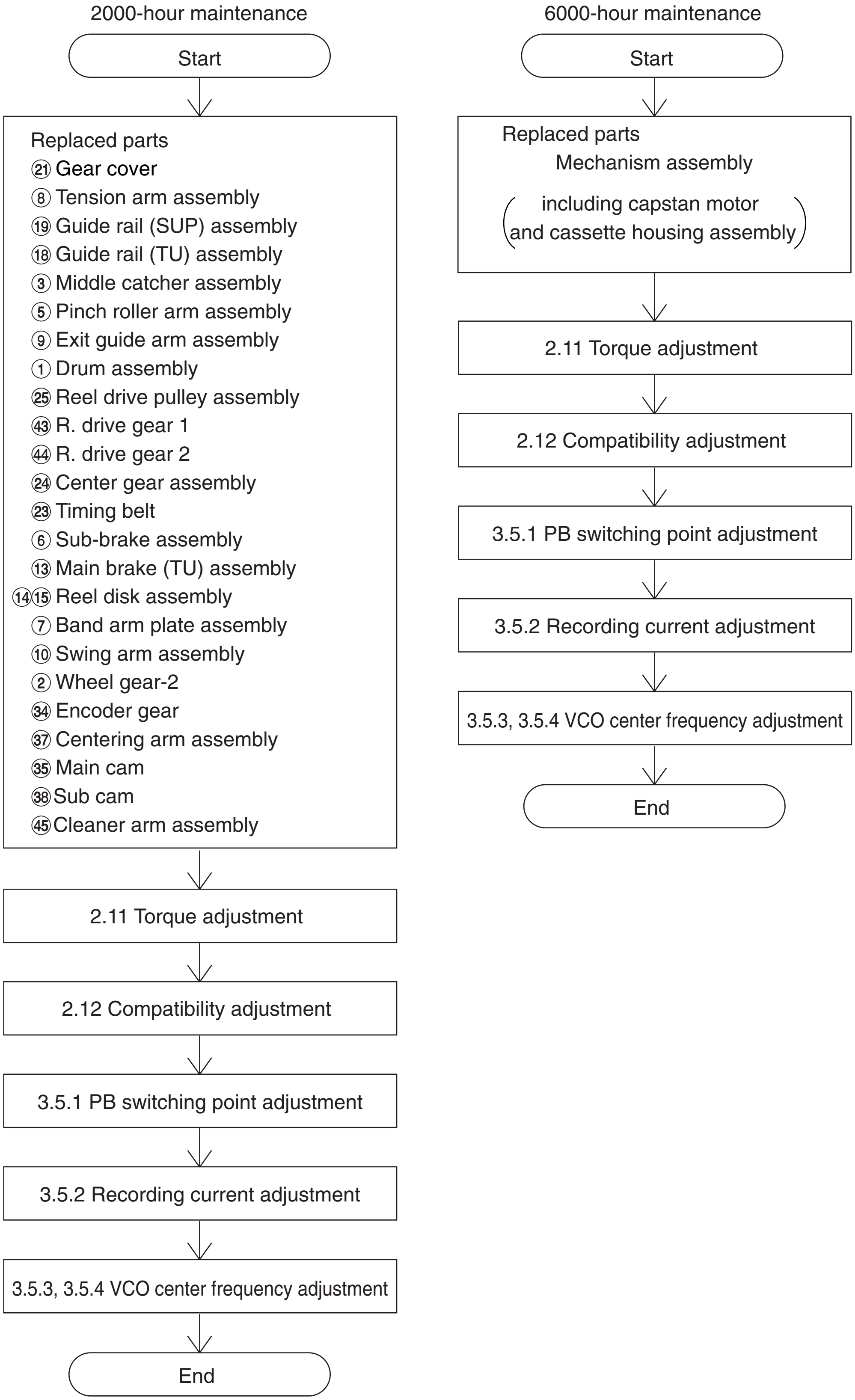

2000-hour maintenance
Start
Replaced parts
㉑ Gear cover
⑧ Tension arm assembly
⑲ Guide rail (SUP) assembly
⑱ Guide rail (TU) assembly
③ Middle catcher assembly
⑤ Pinch roller arm assembly
⑨ Exit guide arm assembly
① Drum assembly
㉕ Reel drive pulley assembly
㊸ R. drive gear 1
㊹ R. drive gear 2
㉔ Center gear assembly
㉓ Timing belt
⑥ Sub-brake assembly
⑬ Main brake (TU) assembly
⑭⑮ Reel disk assembly
⑦ Band arm plate assembly
⑩ Swing arm assembly
② Wheel gear-2
㉞ Encoder gear
㊲ Centering arm assembly
㉟ Main cam
㊳ Sub cam
㊺ Cleaner arm assembly
2.11 Torque adjustment
2.12 Compatibility adjustment
3.5.1 PB switching point adjustment
3.5.2 Recording current adjustment
3.5.3, 3.5.4 VCO center frequency adjustment
End
6000-hour maintenance
Start
Replaced parts
Mechanism assembly
(including capstan motor and cassette housing assembly)
2.11 Torque adjustment
2.12 Compatibility adjustment
3.5.1 PB switching point adjustment
3.5.2 Recording current adjustment
3.5.3, 3.5.4 VCO center frequency adjustment
End

Fig. 2-5-1

2.6 DISASSEMBLY/ASSEMBLY OF MECHANISM ASSEMBLY

2.6.1 Assembly/disassembly

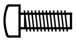
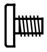
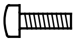
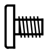
The following table shows the mechanism assembly/disassembly procedures.

① : Names of the disassembled/assembled parts.
② : Items of disassembly.
③ : Parts to be removed for disassembly, such as screws, washers and springs, and points.

Symbol	Name or Point
S	Screw
W	Washer
P	Spring
*	Connector, lock (L), soldering (SD), shield, etc.

2.6.2 Screws and washers used in mechanism assembly disassembly/assembly

Table 2-6-1 shows the symbols, designs, part numbers and colors of the screws and washers used with the Mechanism assembly.
When disassembling or assembling the Mechanism assembly, be sure to attach the correct screws and washers by referring to the following table.

Symbol	Design	Part No.	Color
(S1)		QYSDSP2005Z	Gold
(S2)		YQ43893	Silver
(S3)		YQ43893-7	Black
(S4)		QYSPSF2006Z	Gold
(S5)		LL40426-001A	Silver

Symbol	Design	Part No.	Color
W1		YQ44246	Red
W2		YQ44246-3	Black
W3		YQ43933-2	Black

Fig. 2-6-1

	Part Name	Item No.	Points	Remark
1	Ⓐ Cassette housing assembly, Ⓑ Main deck assembly	1	2(S1), 2(L1)	
2	① Drum assembly	2	3(S2)	
3	② Motor bracket (Gear cover) assembly	2	2(S2)	
4	③ Middle catcher assembly	5	3(S2)	

↑ ↑ ↑
① ② ③

2.6.3 Mechanism assembly disassembly procedure table

No.	Part Name	Item No.	Points	Remark
1	Ⓐ Cassette housing assembly	1	2 (S5), 2 (L1)	
2	① Drum assembly	2	3 (S2)	
3	② Motor bracket (Gear cover) assembly	2	2 (S2)	
4	③ Middle catcher assembly	5	3 (S2)	
5	④ Reel cover assembly	6	(S2), 2 (L6)	
6	⑤ Pinch roller arm assembly	3	(W1), (L7)	
7	⑥ Sub-brake assembly	10	(P1), (W1), (L8)	
8	⑦ Band arm plate assembly	8	(S3), (L9), (P2), (W2)	
9	⑧ Tension arm assembly	8	(P3)	
10	⑨ Exit guide arm assembly	4	(W1)	
11	⑩ Swing arm assembly	7	–	Position alignment
12	⑪ Sub-deck assembly	9	5 (S2)	Position alignment
13	⑫ Main brake (SUP) assembly	10	(P4), (L10)	
14	⑬ Main brake (TU) assembly	10	(P5), (L11)	
15	⑭ Reel disk assembly (SUP)	11	–	
16	⑮ Reel disk assembly (TU)	11	–	
17	⑯ Prism	7	(S2)	
18	⑰ Control plate	11	2 (L12)	
19	⑱ Guide rail (TU) assembly	12	4 (S2)	Position alignment
20	⑲ Guide rail (SUP) assembly	12	(S2), 2 (L13)	Position alignment
21	㉒ Wheel gear 2	13	–	
22	㉓ Timing belt	13	–	
23	㉔ Center gear assembly	13	–	
24	㉕ Reel drive pulley assembly	14	(W1)	
25	㉙ Tension control arm assembly	15	(L15)	Position alignment
26	㉚ Brake control arm assembly	15	(W1), (L16)	Position alignment
27	㉛ Charge arm assembly	15	(L17)	Position alignment
28	㉞ Encoder gear	16	–	Phase alignment
29	㉟ Main cam	16	(W1)	Phase alignment
30	㊱ Arm gear 1 assembly	16	Collar	Position alignment
31	㊲ Centering arm assembly	16	–	Position alignment
32	㊳ Sub cam	17	(S2)	Phase alignment
33	㊴ Arm gear 2 assembly	17	–	Position alignment
34	㊵ Clutch lock lever (C.P.D arm) assembly	17	(L19)	Position alignment
35	㊶ Capstan motor	–	–	Change with mechanism assembly
36	㊷ Drum base deck	–	3 (S2)	
37	㊸ R.drive gear 1	14	(W1)	
38	㊹ R.drive gear 2	14	(W1)	
39	㊺ Cleaner (Exit guide) arm assembly	4	(W1)	

Table 2-6-2

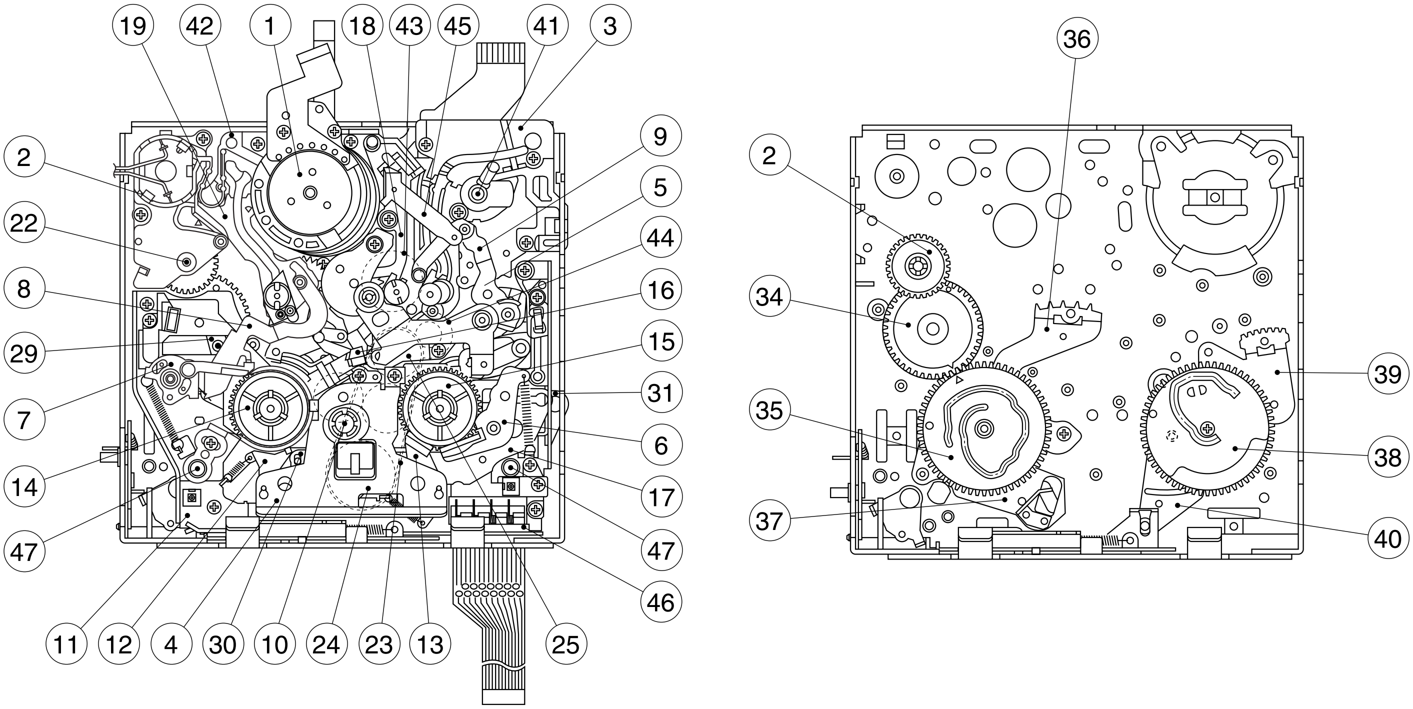

19
42
1
18
43
45
41
3
36
2
9
2
5
22
44
8
16
34
29
15
7
31
39
35
14
6
38
17
47
37
40
47
46
11
12
4
30
10
24
23
13
25

Fig. 2-6-1

2.6.4 Mechanism disassembly/assembly procedure chart

<How to read the chart>

- The following chart shows the disassembly/assembly procedures by dividing them into blocks A to I.
- To remove the tension arm sub-assembly which is located in block D; start disassembly from block A. The tension arm sub-assembly can be removed as the fourth operation after the removals of the cassette housing assembly (block A) → reel cover assembly (block B) → band arm plate assembly (block C).
- The parts enclosed in thick frames are the maintenance parts listed in the maintenance table.
- For details on the disassembly/assembly, see section 2.7, "Replacement of Major Parts".

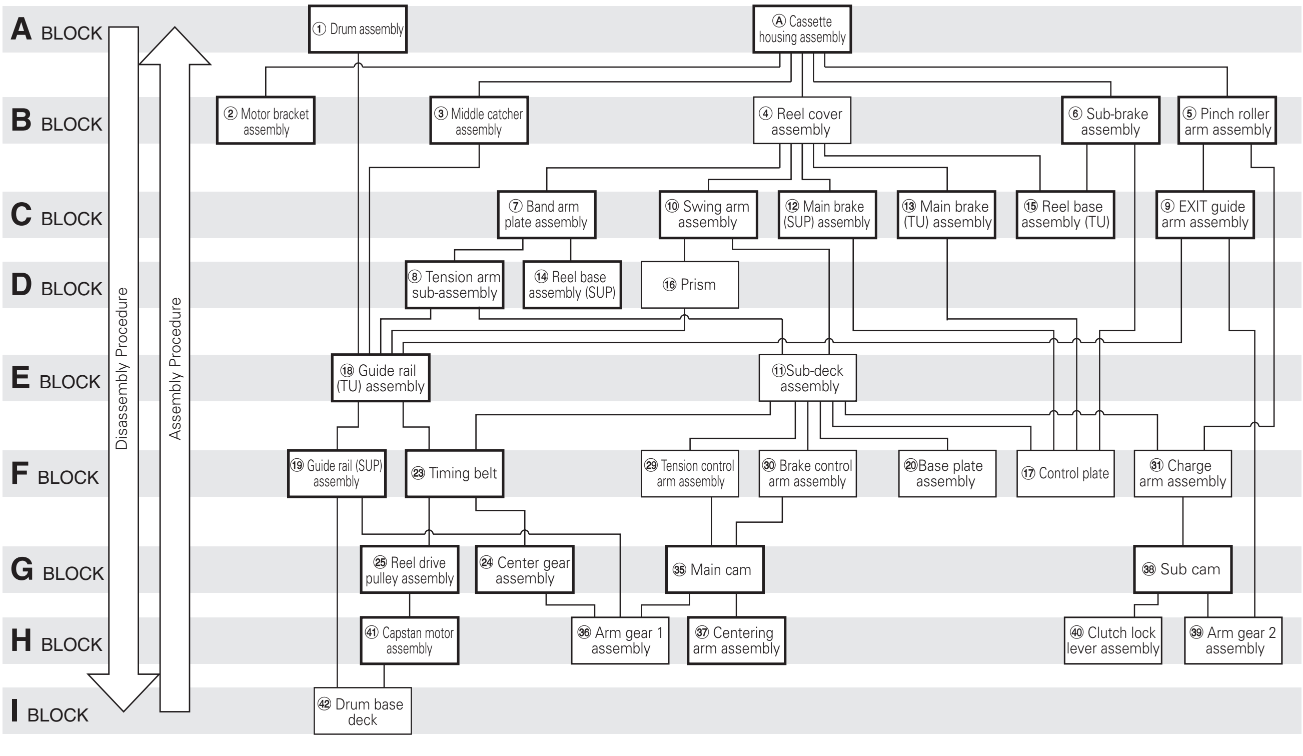
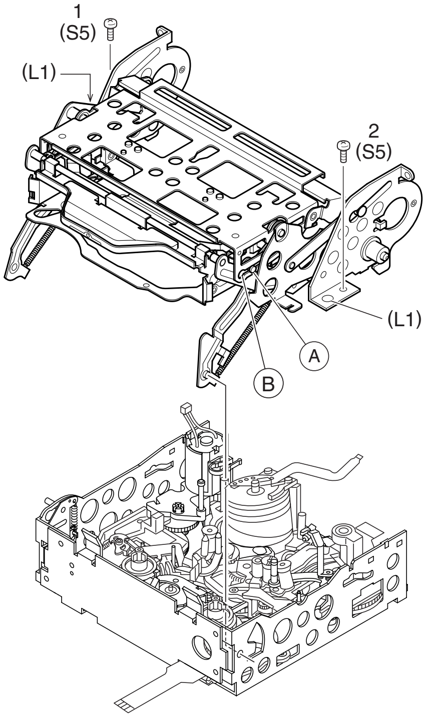
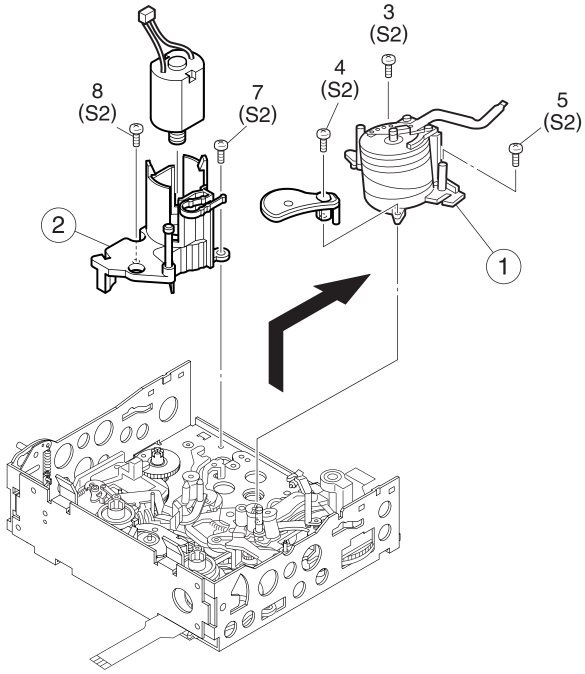

A BLOCK
B BLOCK
C BLOCK
D BLOCK
E BLOCK
F BLOCK
G BLOCK
H BLOCK
I BLOCK
Disassembly Procedure
Assembly Procedure
① Drum assembly
Ⓐ Cassette housing assembly
② Motor bracket assembly
③ Middle catcher assembly
④ Reel cover assembly
⑥ Sub-brake assembly
⑤ Pinch roller arm assembly
⑦ Band arm plate assembly
⑩ Swing arm assembly
⑫ Main brake (SUP) assembly
⑬ Main brake (TU) assembly
⑮ Reel base assembly (TU)
⑨ EXIT guide arm assembly
⑧ Tension arm sub-assembly
⑭ Reel base assembly (SUP)
⑯ Prism
⑱ Guide rail (TU) assembly
⑪Sub-deck assembly
⑲ Guide rail (SUP) assembly
㉓ Timing belt
㉙ Tension control arm assembly
㉚ Brake control arm assembly
⑳Base plate assembly
⑰ Control plate
㉛ Charge arm assembly
㉕ Reel drive pulley assembly
㉔ Center gear assembly
㉟ Main cam
㊳ Sub cam
㊶ Capstan motor assembly
㊱ Arm gear 1 assembly
㊲ Centering arm assembly
㊵ Clutch lock lever assembly
㊴ Arm gear 2 assembly
㊷ Drum base deck

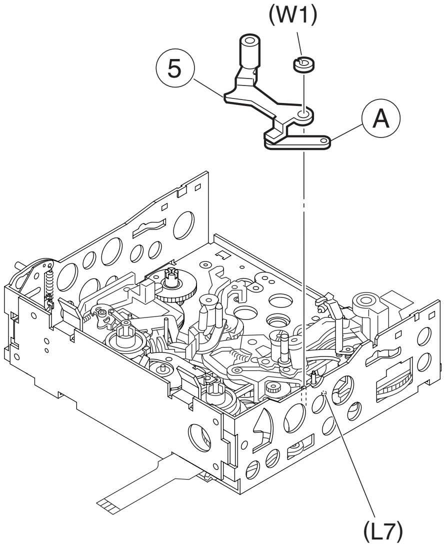
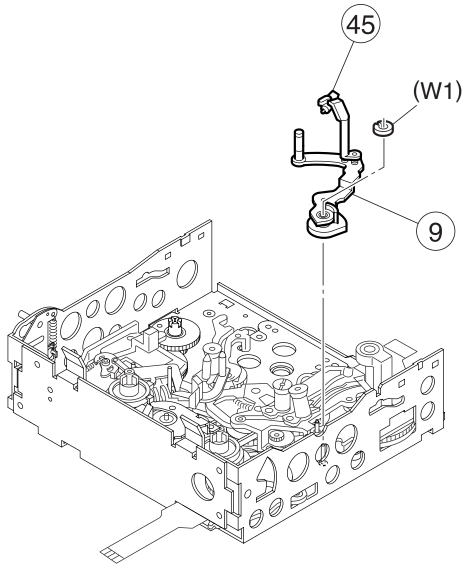
Fig. 2-6-2

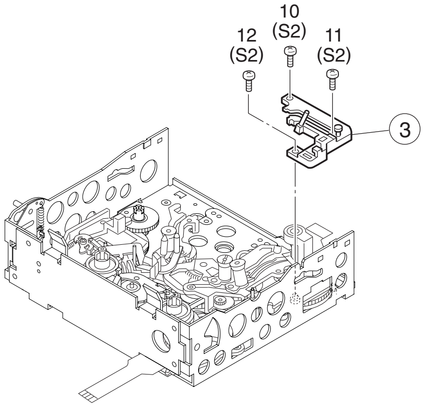
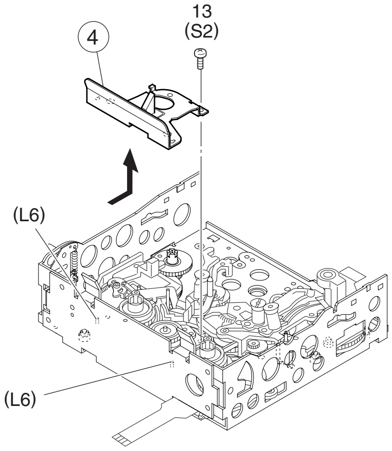
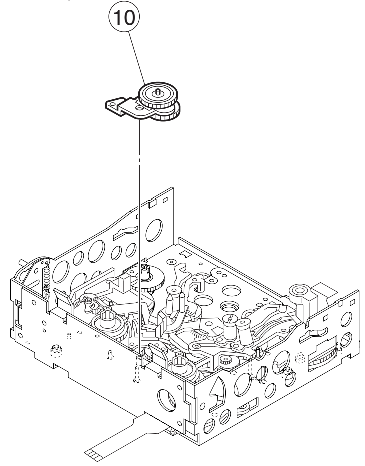
No.	Item	Reference picture/drawing	Procedure

2.7 REPLACEMENT OF MAJOR PARTS

- Make sure that the mechanism is in the ASSEMBLY mode before proceeding to disassembly or assembly. (See section 2.1, "Assembly Mode".)
- Screws must always be tightened using a torque screwdriver and at the specified torque.

1	Ⓐ Cassette housing assembly  **Fig. 2-7-1**	**<Removal>** ① Cassette housing assembly See the 1.3.2 Cassette housing on the page 1-4. ② Outer unit assembly 1) Align the boss Ⓐ that pulls out the cassette housing to the round hole Ⓑ of Outer unit assembly, and then remove it. **<Attaching>** 1) Reverse the removal procedure.
2	① Drum assembly, ② Motor bracket (Gear cover) assembly  3 (S2) 4 (S2) 8 (S2) 7 (S2) 5 (S2) 2 1 **Fig. 2-7-2**	**<Removal>** ① Drum assembly 1) Remove the 3 screws (S2) and take out the assembly. ② Motor bracket (Gear cover) assembly 1) Remove the 2 screws and take out the motor bracket assembly. 2) After removing the lock of the motor bracket, the motor can be removed by lifting the motor upward. **<Attaching>** 1) Reverse the removal procedure **NOTE** · **When mounting the motor, make sure that the claw of the motor bracket is properly locked.** **If the claw is not properly locked, change the direction for mounting the motor.**

No.	Item	Reference picture/drawing	Procedure
3	⑤ Pinch roller arm assembly	 **Fig. 2-7-3**	**<Removal>** 1) Remove the washer (W1) and pull out the assembly. **<Attaching>** 1) Fit the pinch roller arm assembly Ⓐ into the boss (L7) of the charge arm assembly. 2) Attach the washer (W1).
4	⑨ Exit guide arm assembly ㊺ Cleaner arm assembly	 **Fig. 2-7-4**	**<Removal>** 1) Remove the washer (W1) and pull out the assembly. **<Attaching>** 1) Reverse the removal procedure.

No.	Item	Reference picture/drawing	Procedure
5	③ Middle catcher assembly	 **Fig. 2-7-5**	**<Removal>** 1) Remove the 3 screws (S2) and remove the assembly. **<Attaching>** 1) Reverse the removal procedure.
6	④ Reel cover assembly	 **Fig. 2-7-6**	**<Removal>** 1) Remove the screw (S2). 2) Slide the assembly toward the drum and lift the assembly up to remove it. **NOTE** · **After having removed the reel cover, take care because the parts located below the reel cover tend to slip out easily.** **<Attaching>** 1) Insert the reel cover into (L6) and attach by reversing the removal procedure.
7	⑩ Swing arm assembly	 **Fig. 2-7-7**	**<Removal>** 1) Pull the assembly upward. **<Attaching>** 1) Reverse the removal procedure.

No.	Item	Reference picture/drawing	Procedure

8 ⑦ Band arm plate assembly, ⑧ Tension arm assembly

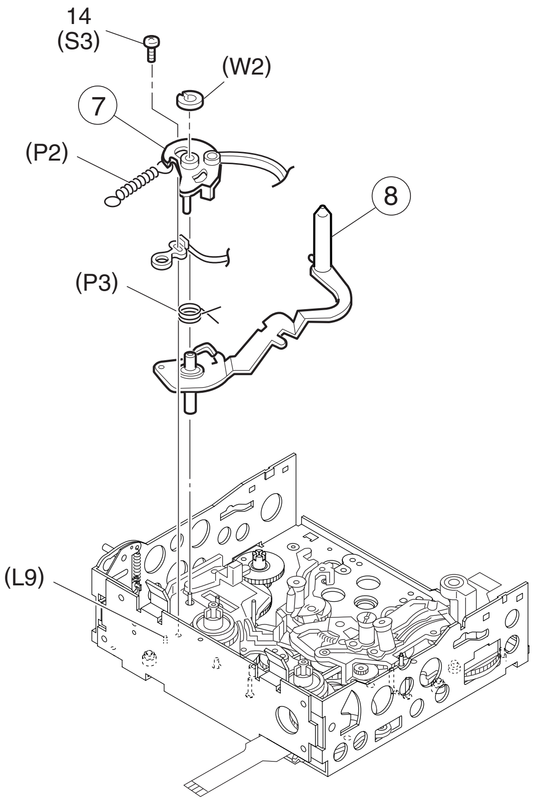
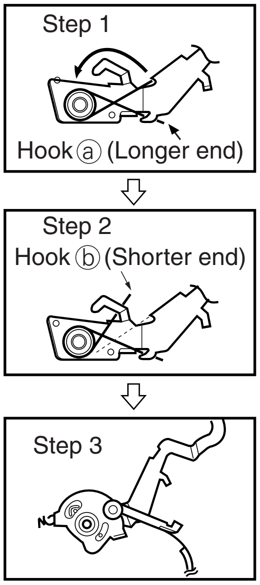


Fig. 2-7-8(a)

Attaching the spring



The spring (P3) should be attached only to the tension arm assembly ⑧. It should not contact the band arm plate assembly ⑦.

Fig. 2-7-8(b)

<Removal>

1) Remove the washer (W2).
2) Remove the screw (S3).
3) Remove the spring (P2).
4) Remove the band arm plate assembly and tension arm assembly.

NOTE

Be careful not to lose the spring (P3).

<Attaching>

1) Attach the spring (P3) to the tension arm assembly. Engage the longer end of spring to hook ⓐ and the shorter end to hook ⓑ as shown in Fig. 2-7-8(b).
2) Attach the tension arm sub-assembly.
3) Attach the band arm plate assembly.
4) Clamp with the screw (S3) and washer (W2).
5) Attach the spring (P2) to (L9).

NOTE

After attaching, ensure that the band arm assembly can rotate in the direction of the arrow as shown in Fig. 2-7-8(c).

Attach so that the section Ⓐ comes on the outer side of the tension arm assembly ⑧.

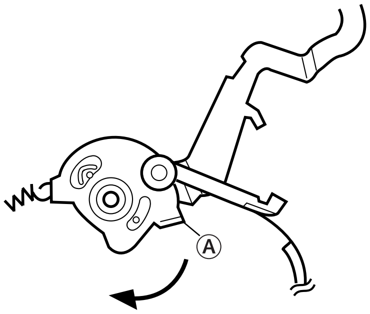


Fig. 2-7-8(c)

6) After attaching, adjust the tension.

No.	Item	Reference picture/drawing	Procedure

8 <Tension arm assembly position adjustment>

1) Without loading a tape, set the mechanism mode to PLAY mode.
   To switch the mode, rotate wheel gear 2 while the motor bracket assembly is disengaged (see 2.2, "Mechanism Modes").

2) Rotate the tension arm slightly clockwise to eliminate production of rattle with the band arm plate.
3) Ensure that the notch on the tension arm is located within area A. (See Fig. 2-7-8(e).)
4) If the tension arm is not located in area A, loosen screw B (black) lightly and fine-adjust the position of the band arm plate assembly. Turn the screw counterclockwise to move the tension arm extremity toward the right or clockwise to move it toward the left.
5) After the adjustment, clamp the band holder by tightening screw B (black) (with a securing torque of 5.88 Nm, or 0.6 kgf-cm). Then adjust the tension arm position again.

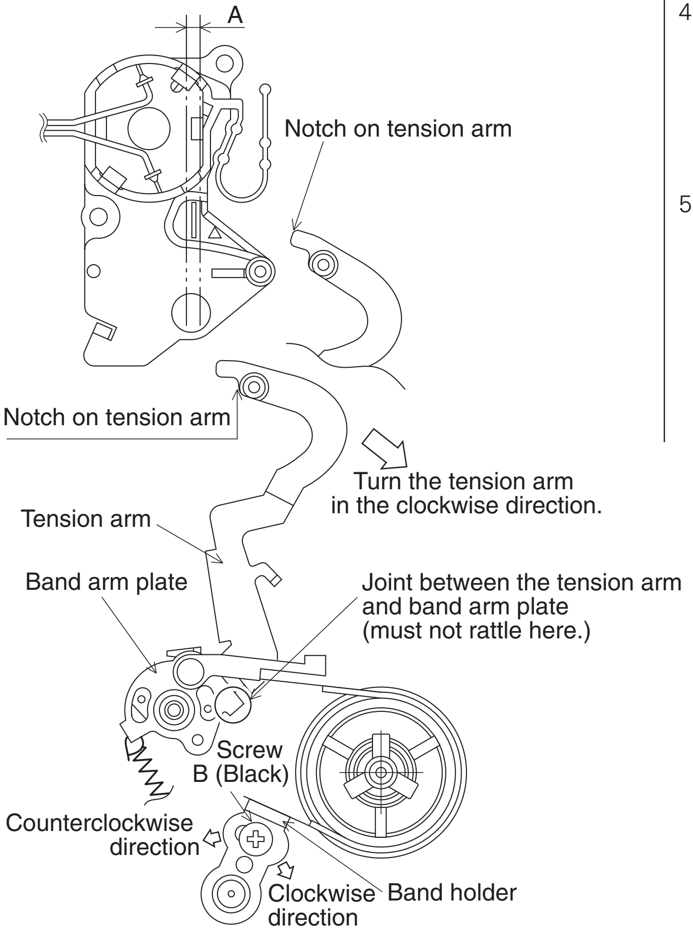

A
Notch on tension arm
Notch on tension arm
Turn the tension arm in the clockwise direction.
Tension arm
Band arm plate
Joint between the tension arm and band arm plate (must not rattle here.)
Screw B (Black)
Counterclockwise direction
Clockwise direction
Band holder

Fig. 2-7-8(d)

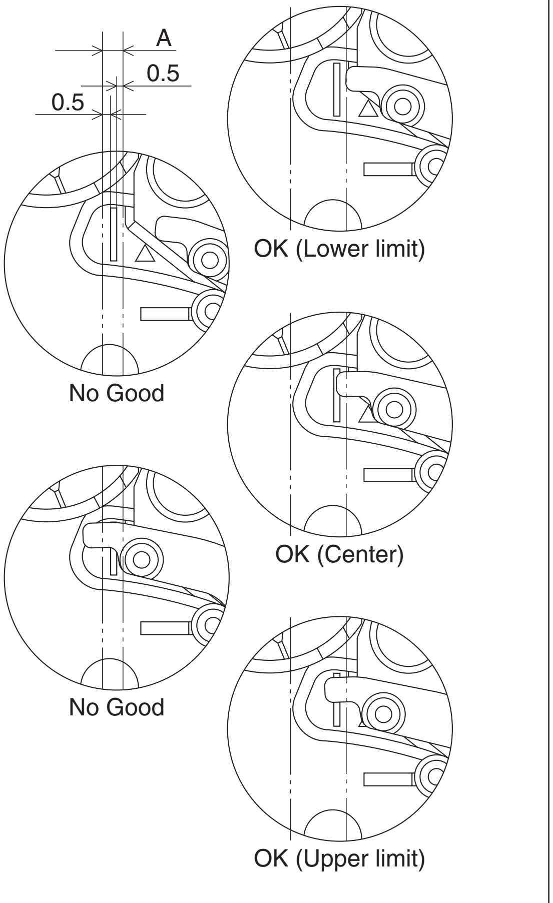
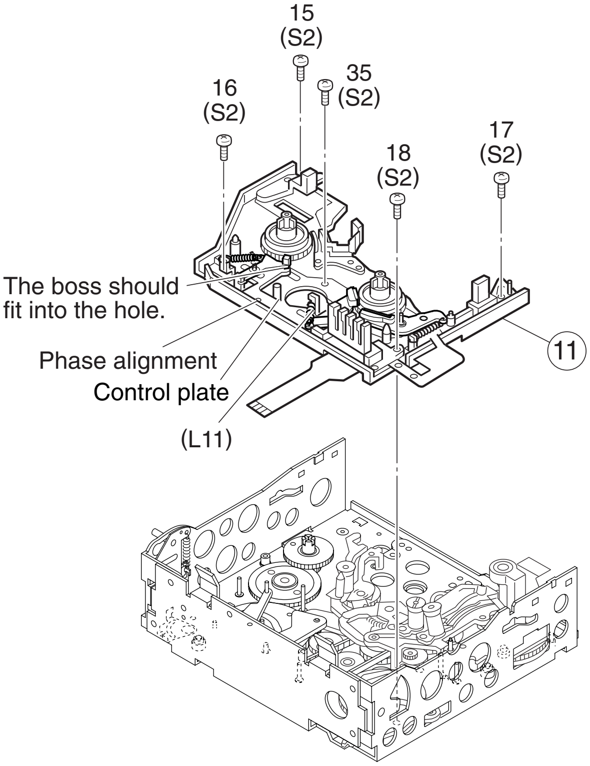
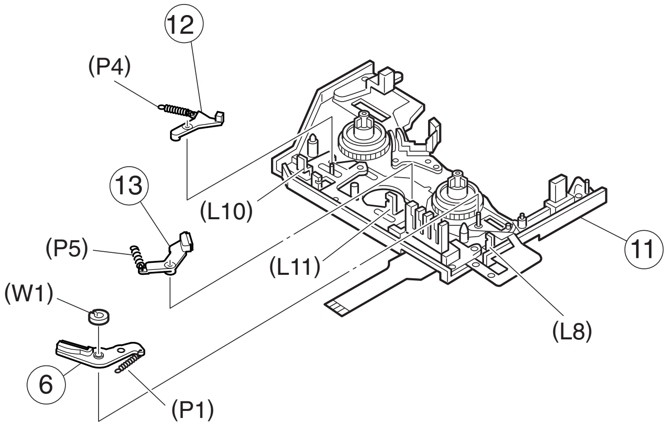

A
0.5
0.5
OK (Lower limit)
No Good
OK (Center)
No Good
OK (Upper limit)

Fig. 2-7-8(e)

No.	Item	Reference picture/drawing	Procedure
9	⑪ Sub-deck assembly	 15 (S2) 16 (S2) 35 (S2) 18 (S2) 17 (S2) The boss should fit into the hole. Phase alignment Control plate (L11) 11 **Fig. 2-7-9**	**<Removal>** 1) Remove the 5 screws (S2) and pull out the assembly. **<Attaching>** 1) While sliding the control plate toward the left, attach the sub-deck assembly. **NOTE** · **Attach by aligning the phase holes of the main deck assembly and control plate.** 2) Clamp with 5 screws (S2).
10	⑫ Main brake (SUP) assembly, ⑬ Main brake (TU) assembly, ⑥ Sub-brake assembly	 12 (P4) 13 (L10) (P5) (L11) 11 (W1) (L8) 6 (P1) **Fig. 2-7-10**	**<Removal>** **Main brake (SUP) (TU) assembly** 1) Remove the spring by disengaging its ends from the hooks (L10) and (L11). **Sub-brake assembly** 1) Remove the washer (W1). 2) Remove the spring by disengaging it from the hook (L8). **<Attaching>** 1) Reverse the removal procedure.

<table>
<tr><th>No.</th><th>Item</th><th>Reference picture/drawing</th><th>Procedure</th></tr>
<tr><td>11</td><td colspan="2">⑭ Reel disk (SUP) assembly, ⑮ Reel disk (TU) assembly,
⑰ Control plate, ⑯ Prism

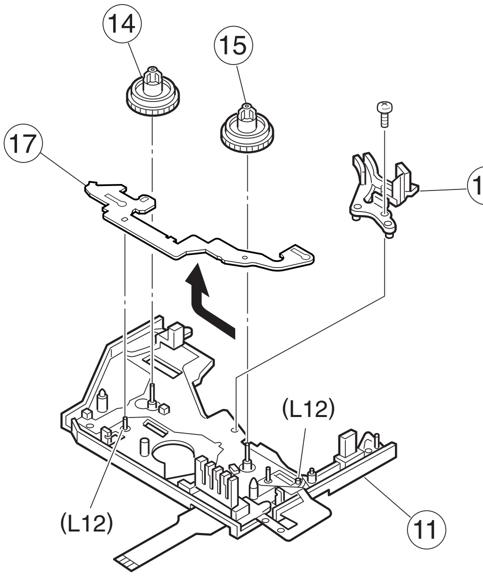


Fig. 2-7-11</td><td>

<Removal>

1) Pull up each assembly to remove it. The control plate can be removed by sliding it toward the left as shown by the arrow.
2) Remove the screw (S2) to remove the prism.

<Attaching>

1) Reverse the removal procedure.
</td></tr>
<tr><td>12</td><td colspan="2">⑱ Guide rail (TU) assembly, ⑲ Guide rail (SUP) assembly

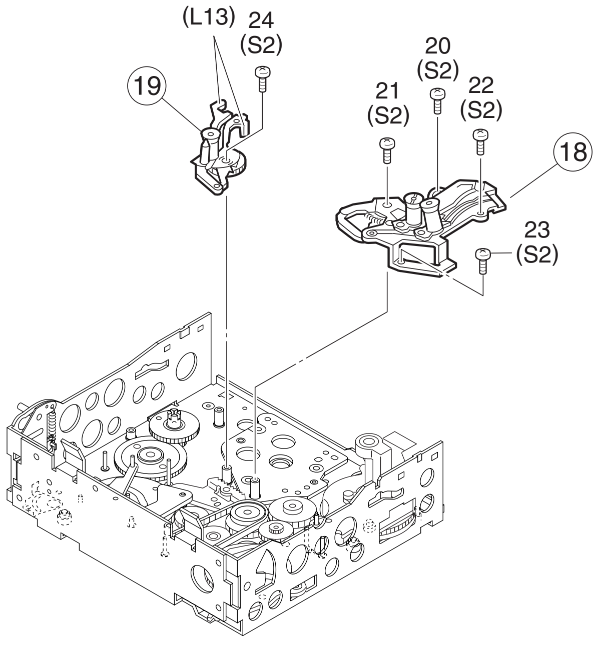


Fig. 2-7-12(a)</td><td>

<Removal>

Guide rail (TU) assembly:

1) Remove the 4 screws (S2) and remove the assembly.

Guide rail (SUP) assembly:

1) Remove the screw (S2) and remove the assembly.

<Attaching>

1) Return the guide pole fully to the unloading position, and attach the assemblies by reversing the removal procedures. When attaching, place the alignment markings of the two gears so that they face each other. (See Fig. 2-7-12(b).)

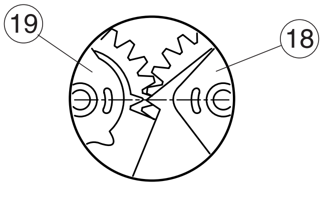
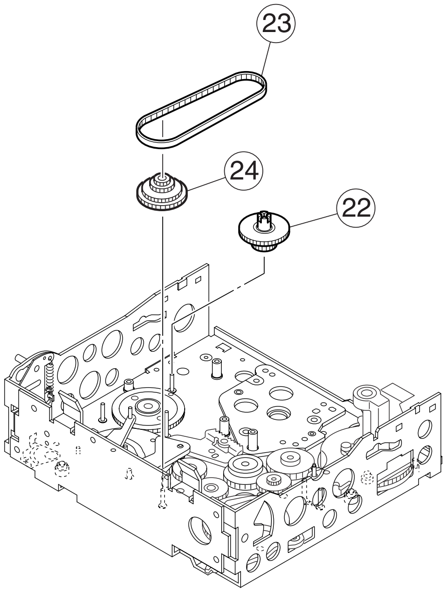
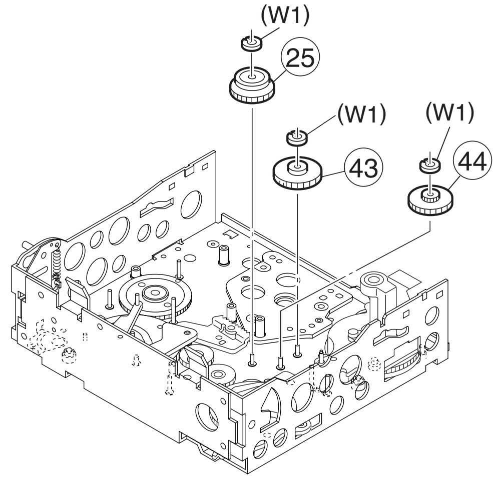
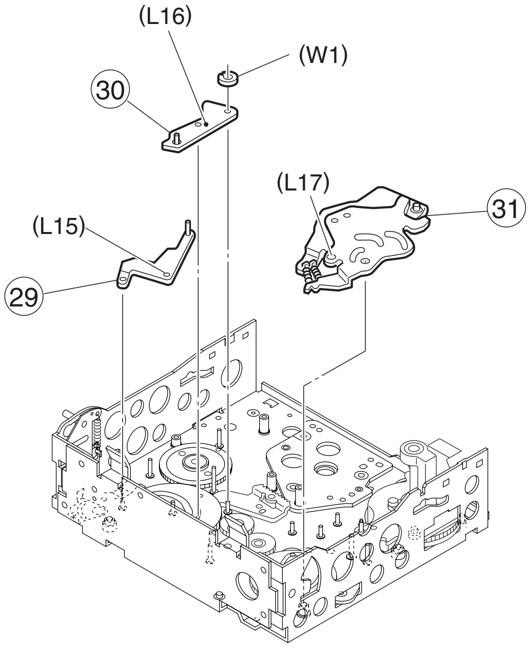


Fig. 2-7-12(b)
</td></tr>
</table>

No.	Item	Reference picture/drawing	Procedure
13	㉒ Wheel gear 2, ㉓ Timing belt, ㉔ Center gear assembly	 **Fig. 2-7-13**	**<Removal>** 1) Each parts can be removed by simply pulling them out. **<Attaching>** 1) Reverse the removal procedure.
14	㉕ Reel drive pulley assembly, ㊸ R. drive gear 1, ㊹ R. drive gear 2	 **Fig. 2-7-14**	**<Removal>** 1) Remove the washer (W1) and take out the assembly. **<Attaching>** 1) Reverse the removal procedure.

No.	Item	Reference picture/drawing	Procedure

15 ㉙ Tension control arm assembly, ㉚ Brake control arm assembly, ㉛ Charge arm assembly



(L16)
(W1)
30
(L17)
31
(L15)
29

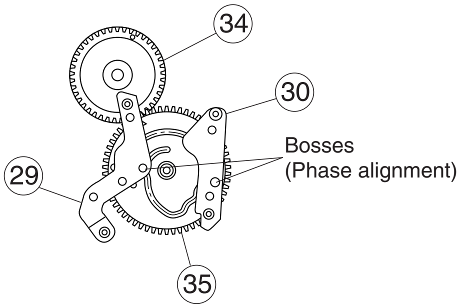
Fig. 2-7-15(a)

<Removal>

1) The brake control assembly can be removed after removing the washer (W1).

<Attaching>

1) Align the phases of the main cam and sub cam , then attach by reversing the removal procedure. Refer to Fig. 2-7-15(b) and Fig. 2-7-15(c).

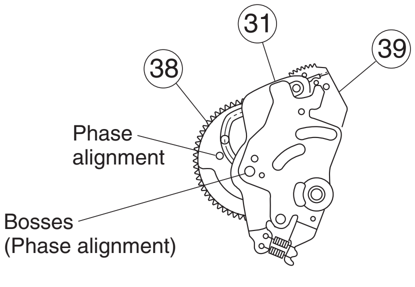


34
30
Bosses
(Phase alignment)
29
35

Align the phase of the main cam ㉟ then attach by fitting the bosses in the cam groove.

Fig. 2-7-15(b)

Attaching Tension Control Arm Assembly ㉙ and Brake Control Arm Assembly ㉚



31
38
39
Phase
alignment
Bosses
(Phase alignment)

Phase alignment

Boss (Phase alignment)

Align the phase of the sub cam ㊳, then attach by fitting the boss into the cam groove.

Fig. 2-7-15(c) Attaching the Charge Arm Assembly ㉛

No.	Item	Reference picture/drawing	Procedure

16 ㉞ Encoder gear, ㉟ Main cam , ㊱ Arm gear 1 assembly, ㊲ Centering arm assembly

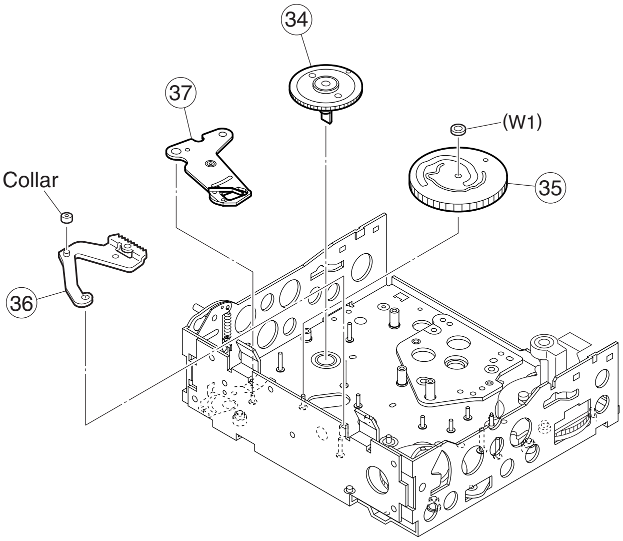
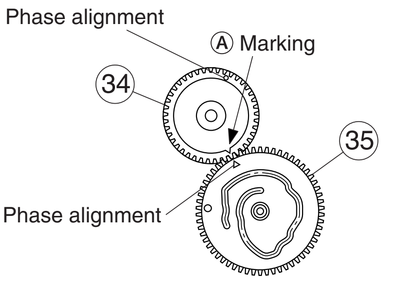

34
37
(W1)
Collar
35
36

Fig. 2-7-16(a)


Phase alignment
Ⓐ Marking
34
35
Phase alignment

Align the phase of the main cam ㉟, then attach by aligning the red-colored markings Ⓐ (on 2 gear teeth) inside ○.

Fig. 2-7-16(c) Attaching the Rotary Encoder Assembly ㉞

<Removal>

1) The main cam can be removed by removing the washer (W1). As the cam gear is engaged at the rear of the main deck assembly while the phase is aligned, deviate the phase in the direction of the arrow before removal. (See Fig. 2-7-16(b).)

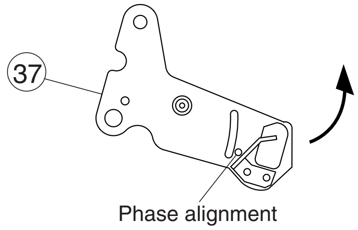
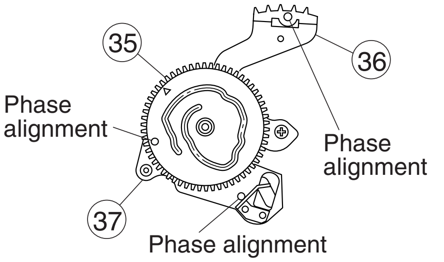

37
Phase alignment

Fig. 2-7-16(b) Removing the Centering Arm Assembly ㊲

<Attaching>

1) Align the phase by referring to Figs. 2-7-16(c) and 2-7-16(d), then attach the ass'ies reverse the removal procedure.


35
36
Phase alignment
Phase alignment
37
Phase alignment

Align the phases of the arm gear 1 assembly ㊱ and centering arm assembly ㊲, then align those of the arm gear 1 assembly ㊱ and centering arm assembly ㊲, attach the gear by fitting the bosses into the cam groove below, and fit the slit washers.

Fig. 2-7-16(d) Attaching the Main Cam ㉟

No.	Item	Reference picture/drawing	Procedure

17 ㊳ Sub cam ㊴ Arm gear 2 assembly, ㊵ Clutch lock lever assembly

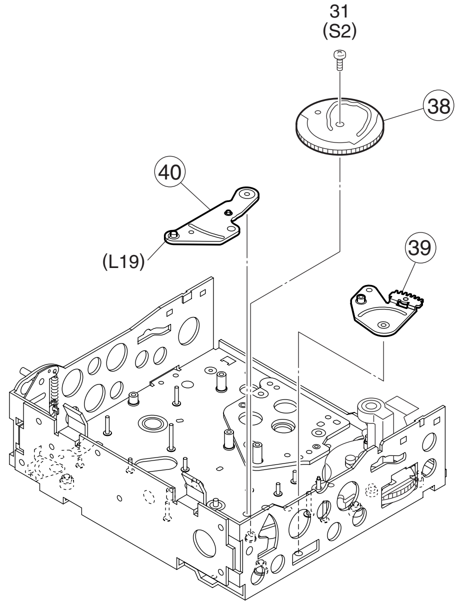

31
(S2)
38
40
(L19)
39

Fig. 2-7-17(a)

<Removal>

1) Remove the screw (S2) and take out the sub cam . As L19 is engaged at the rear of the main deck assembly while the phase is aligned, deviate the phase in the direction of the arrow before removal. 20. This checking should be done after completing the switching point adjustment.

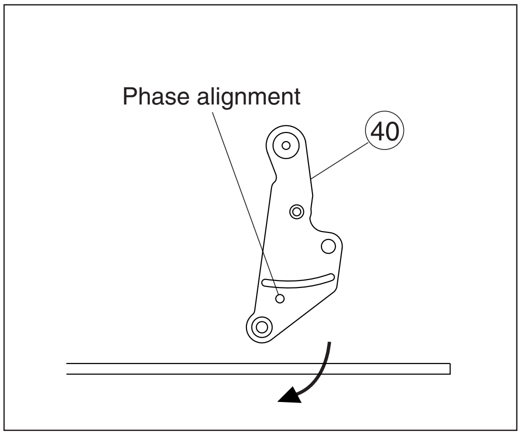
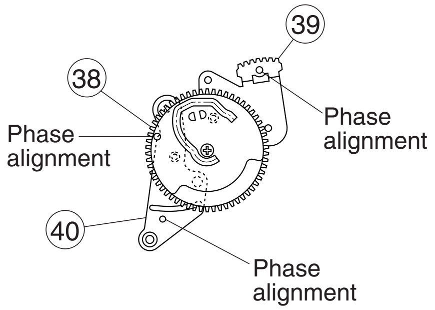

Phase alignment
40

Fig. 2-7-17(b) Removing the Clutch Lock Lever Assembly ㊵

<Attaching>

1) Align the phase correctly by referring to Fig. 2-7-17(c), then attach by reversing the removal procedure.

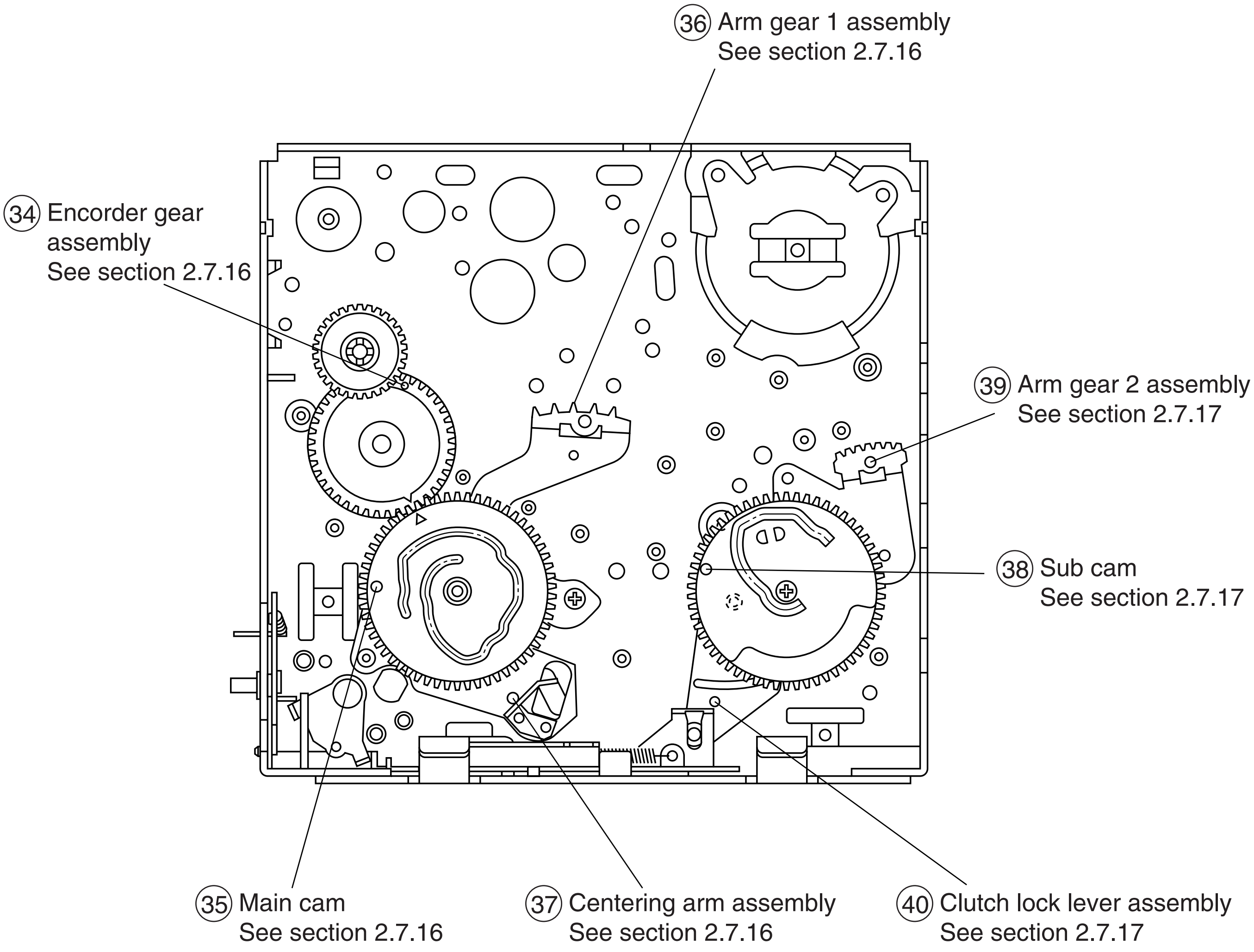

39
38
Phase alignment
Phase alignment
40
Phase alignment

Align the phases of the arm gear 2 assembly ㊴ and clutch lock lever assembly ㊵, attach them by fitting the boss into the cam groove below, and clamp with the screw.

Fig. 2-7-17(c) Attaching the Sub Cam ㊳

2.8 CONFIRMATION AND ADJUSTMENT OF MECHANISM PHASES

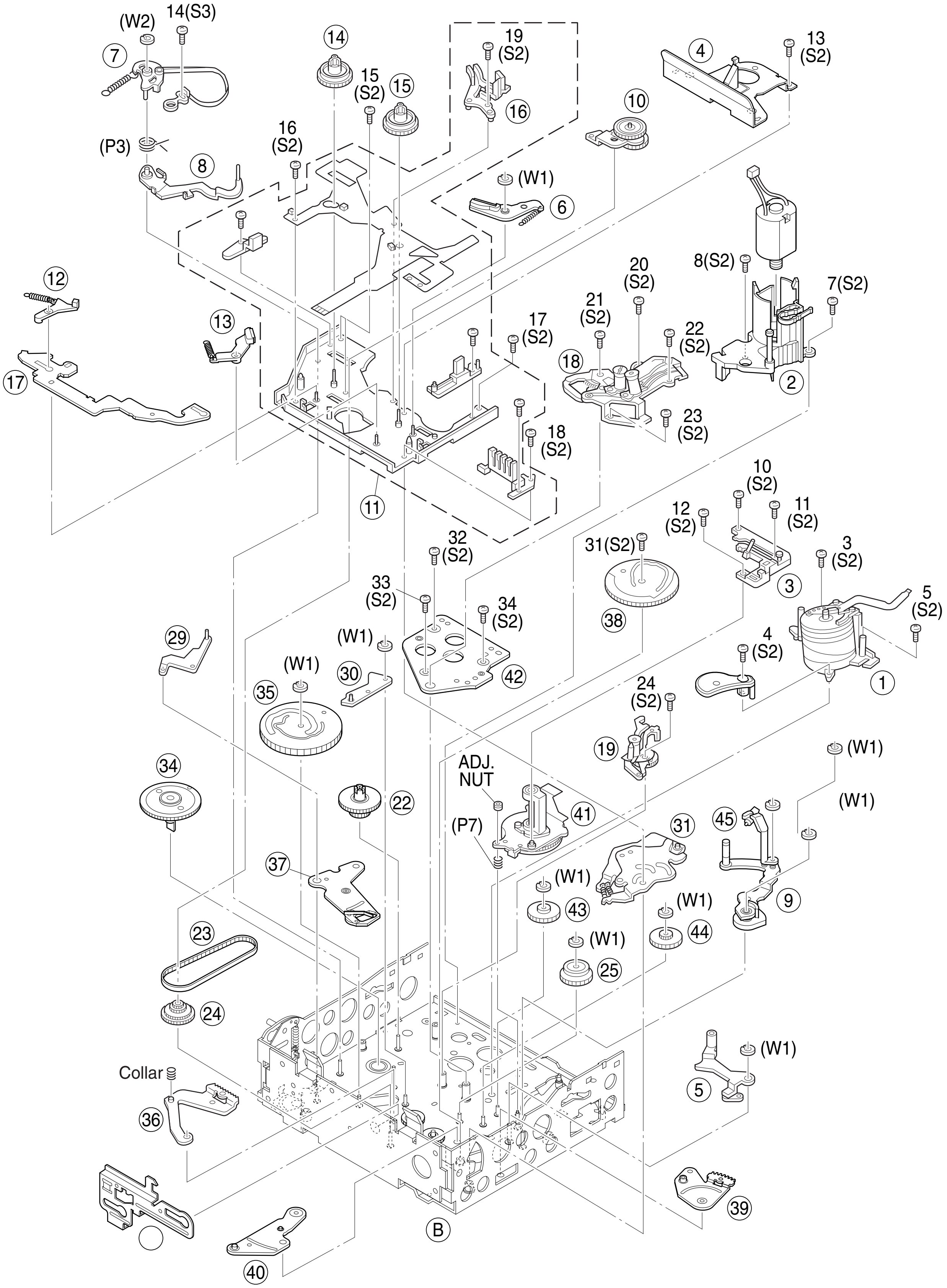
See Fig. 2-8-1.



㊱ Arm gear 1 assembly
See section 2.7.16
㉞ Encorder gear assembly
See section 2.7.16
㊴ Arm gear 2 assembly
See section 2.7.17
㊳ Sub cam
See section 2.7.17
㉟ Main cam
See section 2.7.16
㊲ Centering arm assembly
See section 2.7.16
㊵ Clutch lock lever assembly
See section 2.7.17

Fig. 2-8-1

2.9 DISASSEMBLY PROCEDURE LIST



(W2)
14(S3)
7
(P3)
8
14
15 (S2)
15
16 (S2)
19 (S2)
16
4
13 (S2)
10
(W1)
6
12
13
17
11
20 (S2)
8(S2)
7(S2)
21 (S2)
17 (S2)
22 (S2)
18
2
23 (S2)
18 (S2)
10 (S2)
12 (S2)
11 (S2)
3 (S2)
3
31(S2)
38
32 (S2)
33 (S2)
34 (S2)
42
5 (S2)
1
4 (S2)
29
(W1)
30
(W1)
35
24 (S2)
19
(W1)
(W1)
34
ADJ. NUT
22
41
(P7)
31
45
37
(W1)
43
(W1)
44
9
23
(W1)
25
24
(W1)
Collar
36
5
39
B
40

Fig. 2-9-1

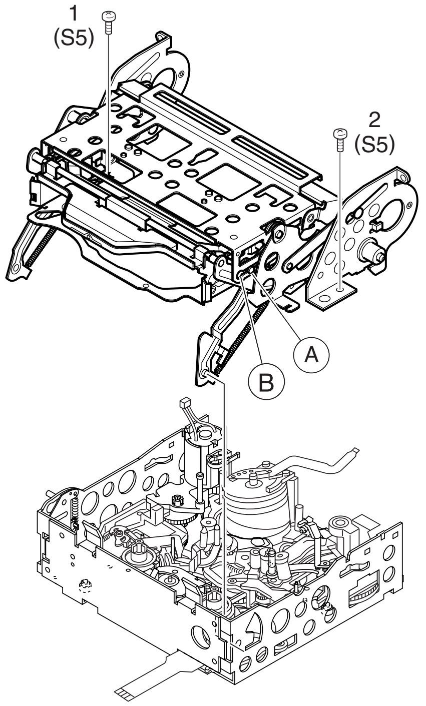
Note) For the grease and oil application points, see section 5.6, "MECHANISM ASSEMBLY PARTS LIST M 6"

2.10 MECHANISM DISASSEMBLY/ASSEMBLY SHEET

Screw Management

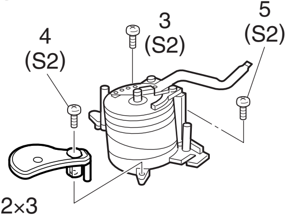
Drawing No.	Ⓐ		①			②		③			④	⑦	⑪				
No.	1	2	3	4	5	7	8	10	11	12	13	14	15	16	17	18	35
Table	S5	S5	S2	S2	S2	S2	S2	S2	S2	S2	S2	S3	S2	S2	S2	S2	S2
Application																	
Ref. No.	No.1		No.2					No.5				No.8	No.9				

Ⓐ Cassette housing assembly



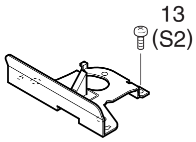
S37×2

① Drum assembly



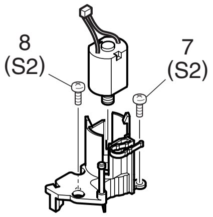
S2×3

④ Reel cover assembly



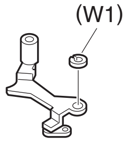
S2,L6×2

② Motor bracket assembly



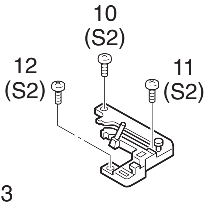
S2×4

⑤ Pinch roller arm assembly



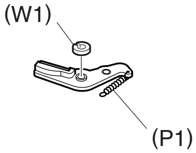
W1,7

③ Middle catcher assembly


10
(S2)
12
(S2)
11
(S2)

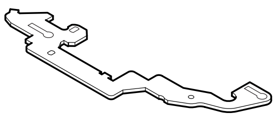
S2×3

⑥ Sub-brake assembly



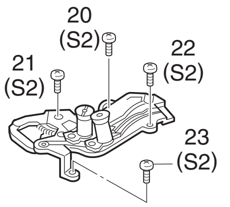
P1,W1,L8

⑰ Control plate



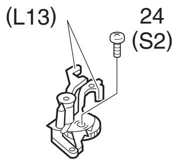
L12×2

⑱ Guide rail (TU) assembly


20
(S2)
22
(S2)
21
(S2)
23
(S2)

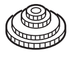
S2×4

⑲ Guide rail (SUP) assembly

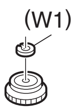


S2,L13×2

㉔ Center gear assembly

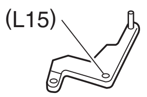


㉕ Reel drive pulley assembly

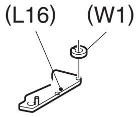


W1

㉙ Tension control arm assembly

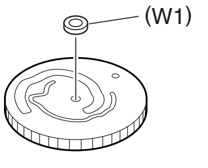


㉚ Brake control arm assembly



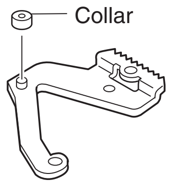
W1,L16

㉟ Main cam



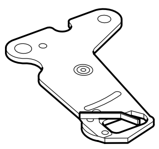
W1

㊱ Arm gear 1 assembly
Collar

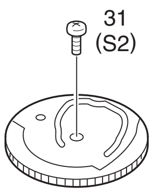


Collar

㊲ Centering arm assembly



㊳ Sub cam

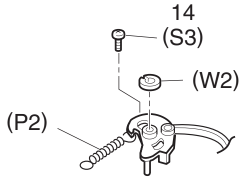


S2

Screw Management									
⑯	⑱				⑲	㊳	㊷		
19	20	21	22	23	24	31	32	33	34
S2	S2	S2	S2	S2	S2	S2	S2	S2	S2
No.11	No.12					No.17	–		

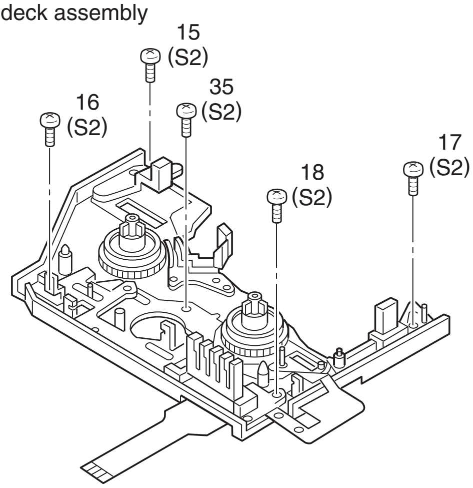
The slit washers cannot be reused once they have been removed.

⑦ Band arm plate assembly



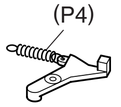
S3,P2,L9,W2

⑪ Sub-deck assembly


15
(S2)
35
(S2)
16
(S2)
17
(S2)
18
(S2)

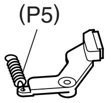
S2×5

⑫ Main brake (SUP) assembly



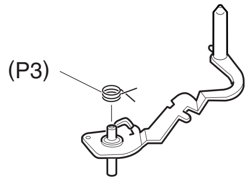
P4,L10

⑬ Main brake (TU) assembly



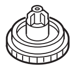
P5,L11

⑧ Tension arm assembly

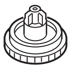


P3

⑭ Reel base assembly (SUP)

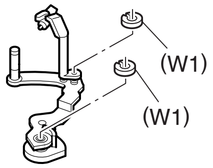


⑮ Reel base assembly (TU)



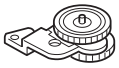
⑨ Exit guide arm assembly

㊺ Cleaner arm assembly

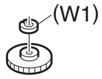


W1

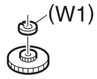
⑩ Swing arm assembly



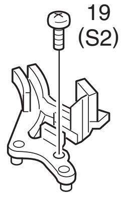
㊸ R. drive gear 1



㊹ R. drive gear 2

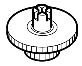


⑯ Prism

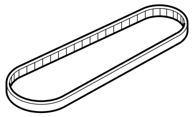


S2

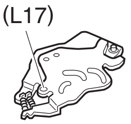
㉒ Wheel gear



㉓ Timing belt

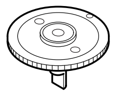


㉛ Charge arm assembly

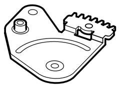


L17

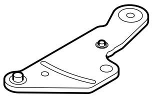
㉞ Encorder gear



㊴ Arm gear 2 assembly

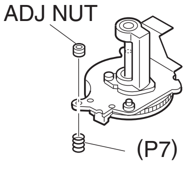


㊵ Clutch lock lever assembly (C.P.D arm assembly)



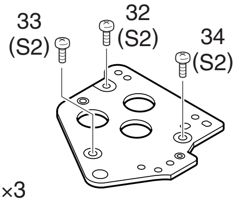
L19

㊶ Capstan motor



ADJ NUT,P7

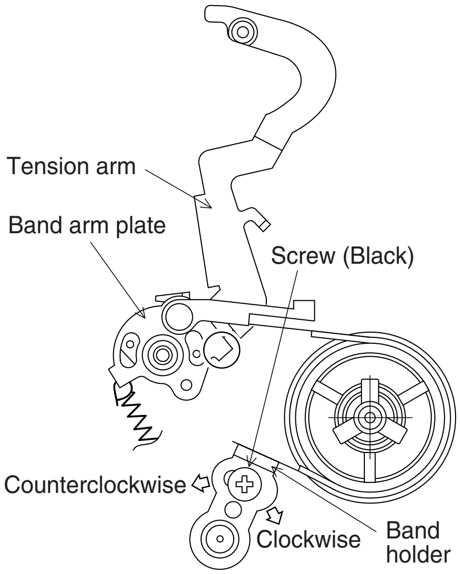
㊷ Drum base deck


33
(S2)
32
(S2)
34
(S2)

S2×3

No.	Item	Measuring instruments & Input signals	Mode	Measuring point (◎) Adjustment parts (⇧) Adjustment level (☆)	Adjustment procedure

2.11 TORQUE ADJUSTMENTS

1	SUP backup torque adjustment	• Cassette torque meter	Play	◎ Supply side indication of cassette torque meter ☆ $3.9^{+1.47}_{-0.39} \times 10^{-4}$ N·m ($4.0^{+1.5}_{-0.4}$ gf·cm)  Tension arm Band arm plate Screw (Black) Counterclockwise Clockwise Band holder	(1) Insert the cassette torque meter and enter play mode. (2) The supply backup torque should be as specified. (If it fluctuates, read the center value.) (3) If it is out of specification, eject the tape, remove the cassette housing, loosen the screw (black) slightly and fine-adjust the band holder. Slightly turn the band holder as follows. · To increase torque: Counterclockwise · To decrease torque: Clockwise. **NOTE** **The screw securing torque should be 0.0588 N-m (0.6 kgf·cm).** 4) Check the supply backup torque again and repeat the above steps until it becomes as specified.
2	Take-up wind torque adjustment	Cassette torque meter YTU94150A	PLAY, Adjustment menu No. 110	◎ Take-up side reading of cassette torque meter ☆ $4.9^{+4.90}_{-1.96} \times 10^{-4}$ N·m ($5.0^{+5.0}_{-2.0}$ gf·cm)	1) Select adjustment menu [119. FWD TORQUE]. **(For the adjustment menu, see 3.3, "Adjustment menu".)** 2) Insert the torque cassette meter YTU94150A and press the [PLAY] button. 3) Adjust the TU wind torque so that it is within the specified range. · Press JOG dial to enter the adjustment mode. · To increase the torque → Rotate JOG dial to the clockwise. · To decrease the torque → Rotate JOG dial to the counter-clockwise. 4) After adjustment, press JOG dial to store the adjustment data.

2.12 COMPATIBILITY ADJUSTMENT

2.12.1 Compatibility adjustment flow chart

Fig. 2-12-1 shows the flow chart of compatibility adjustment.

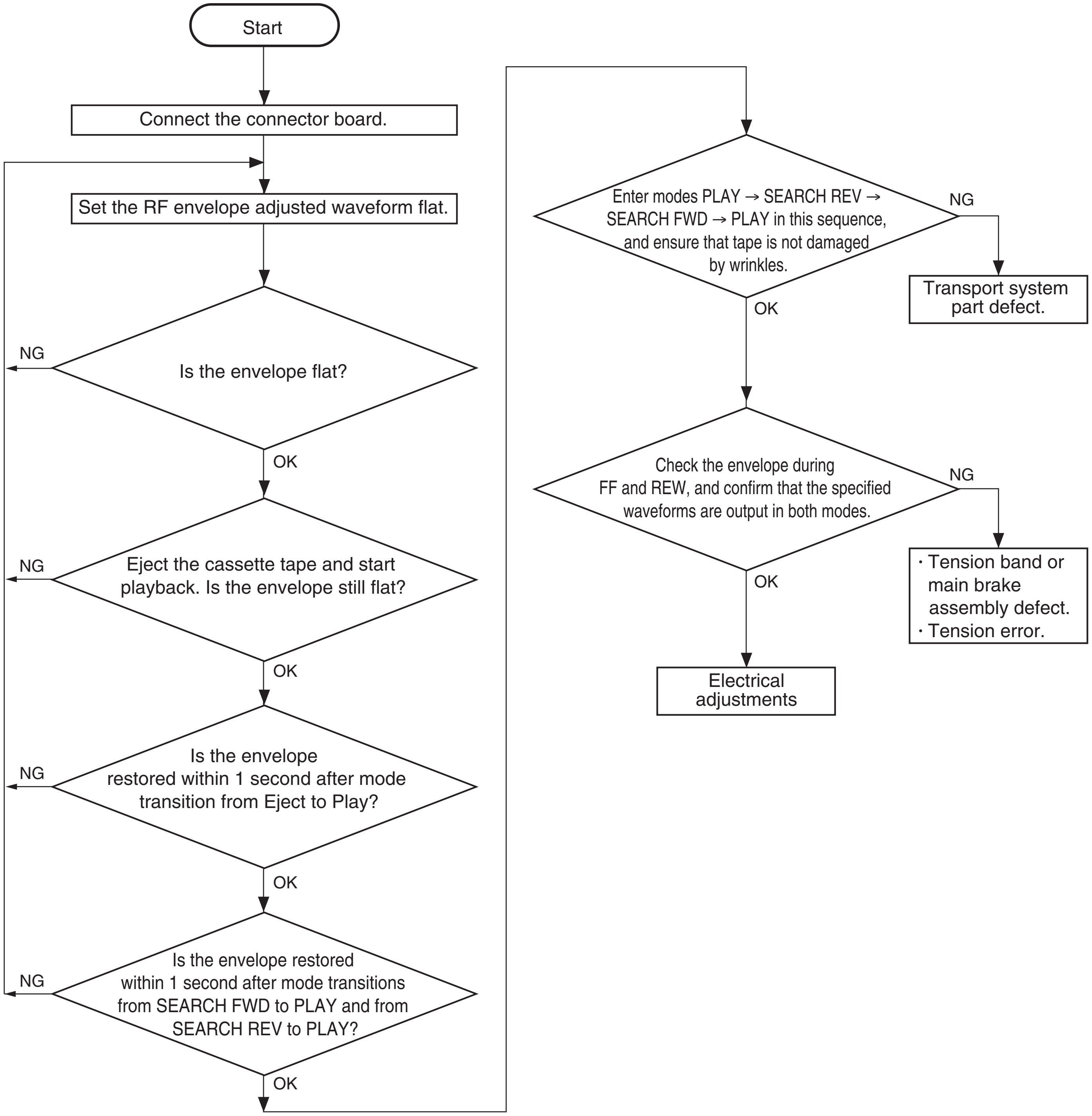

Start
Connect the connector board.
Set the RF envelope adjusted waveform flat.
Is the envelope flat?
NG
OK
Eject the cassette tape and start playback. Is the envelope still flat?
NG
OK
Is the envelope restored within 1 second after mode transition from Eject to Play?
NG
OK
Is the envelope restored within 1 second after mode transitions from SEARCH FWD to PLAY and from SEARCH REV to PLAY?
NG
OK
Enter modes PLAY → SEARCH REV → SEARCH FWD → PLAY in this sequence, and ensure that tape is not damaged by wrinkles.
NG
Transport system part defect.
OK
Check the envelope during FF and REW, and confirm that the specified waveforms are output in both modes.
NG
· Tension band or main brake assembly defect.
· Tension error.
OK
Electrical adjustments

Fig. 2-12-1

2.12.2 Tape transport restriction

The unit uses only the SUP guide roller and TU guide roller to restrict the tape transport. The tape is free (no restriction) from other parts.

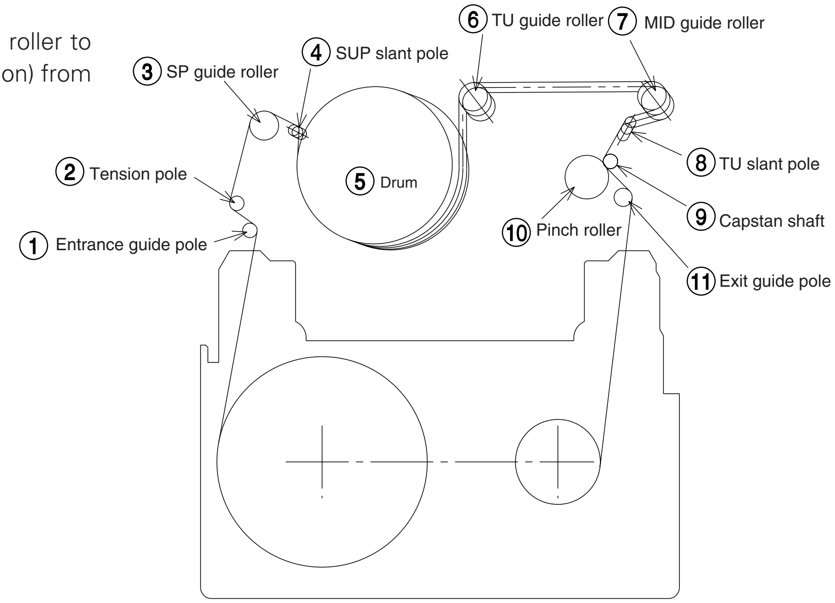

⑥ TU guide roller
⑦ MID guide roller
④ SUP slant pole
③ SP guide roller
⑧ TU slant pole
② Tension pole
⑤ Drum
⑨ Capstan shaft
⑩ Pinch roller
① Entrance guide pole
⑪ Exit guide pole

Fig. 2-12-2

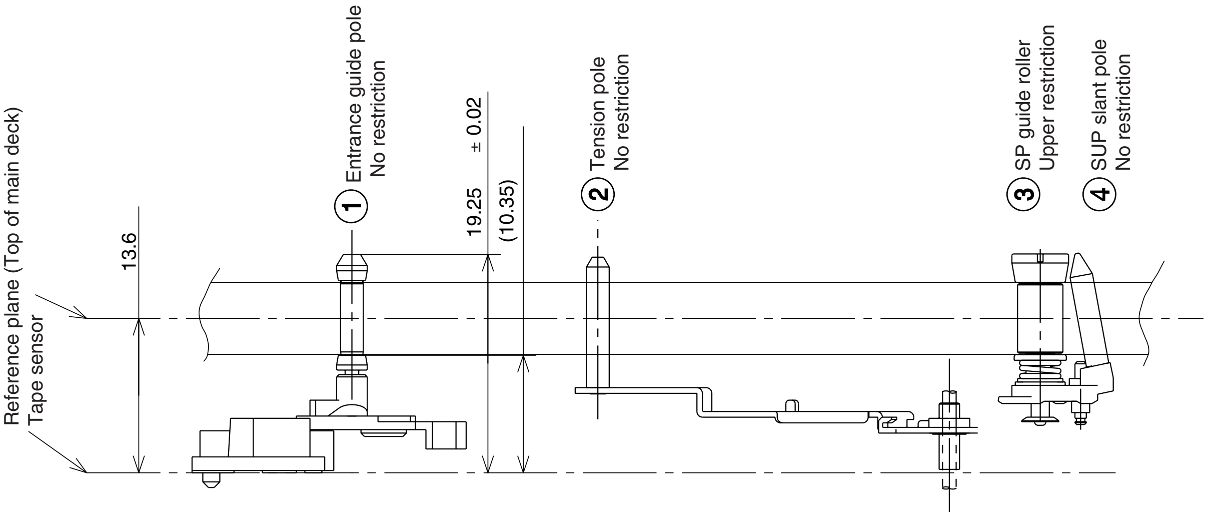

① Entrance guide pole
No restriction
19.25 ± 0.02
(10.35)
② Tension pole
No restriction
③ SP guide roller
Upper restriction
④ SUP slant pole
No restriction
13.6
Reference plane (Top of main deck)
Tape sensor

Fig. 2-12-3 Tape Restriction on Supply Side

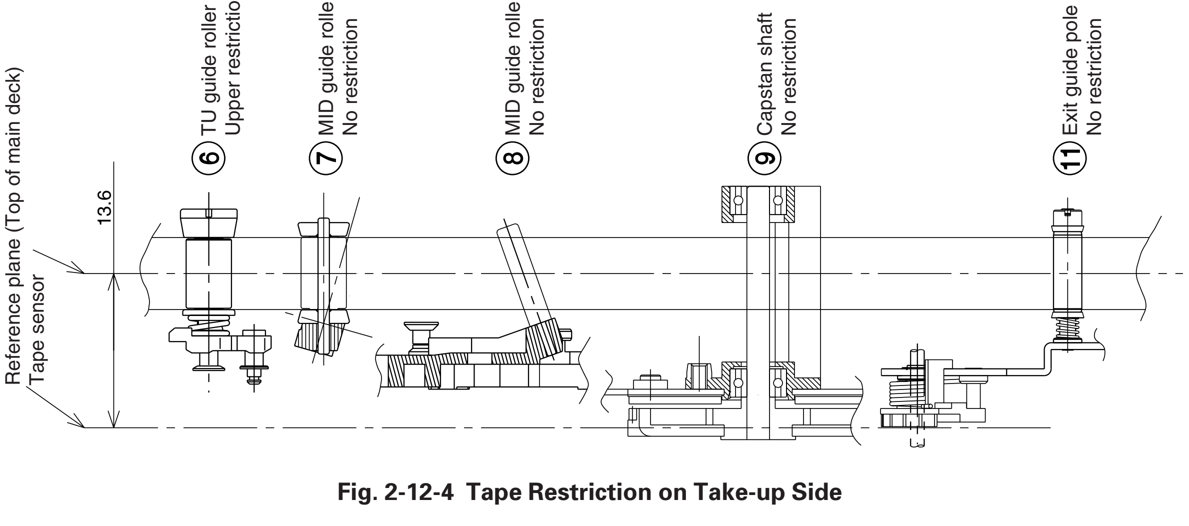

⑥ TU guide roller
Upper restriction
⑦ MID guide roller
No restriction
⑧ MID guide roller
No restriction
⑨ Capstan shaft
No restriction
⑪ Exit guide pole
No restriction
13.6
Reference plane (Top of main deck)
Tape sensor

Fig. 2-12-4 Tape Restriction on Take-up Side

2.12.3 Compatibility adjustment

No.	Item	Measuring instruments & Input signals	Mode	Measuring point (◎) Adjustment parts (⇧) Adjustment level (☆)	Adjustment procedure
1	Preparation				(1) Mount a connector board to the CN23 on the A/L/S board by inserting it in the slot that is provided to accommodate it. This may be achieved without removing the R. side cover. (See Fig. 2-12-6.) **NOTE** · **Make sure the component surface of the connector board is upside.** **NOTE** · **Be sure to clean the tape transport parts and play a cleaning tape before proceeding to the compatibility adjustment.**

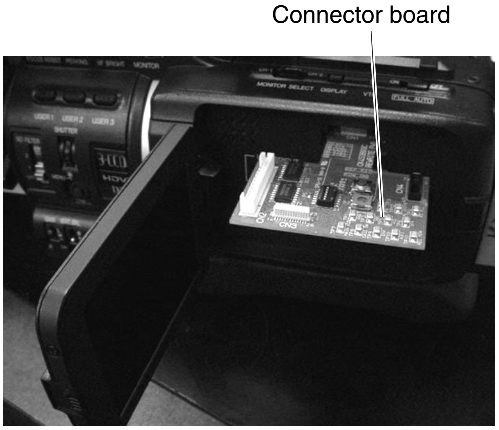


Fig. 2-12-5 How to mount a connector board

No.	Item	Measuring instruments & Input signals	Mode	Measuring point (◎) Adjustment parts (⇧) Adjustment level (☆)	Adjustment procedure
2	RF envelope adjustment	• Oscilloscope, alignment tape MC-1(NTSC) MC-2(PAL) Color bar portion	Play	◎ TP9 ENV OUT [connector board] ◎ TP5 HID [connector board] ⇧ Supply guide roller ⇧ Take-up guide roller ☆ Make the waveforms flat. The drop level should be less than 3 dB with both SUP and TU levels. ☆ Flatness variation should be less than 2 dB.	(1) Play alignment tape color bar portion. (2) Observe the measuring points and adjust the supply guide roller and take-up guide roller so that the RF waveform is flat. (3) Set the mode to EJECT, then set to the PLAY mode and ensure that the RF waveform is flat.

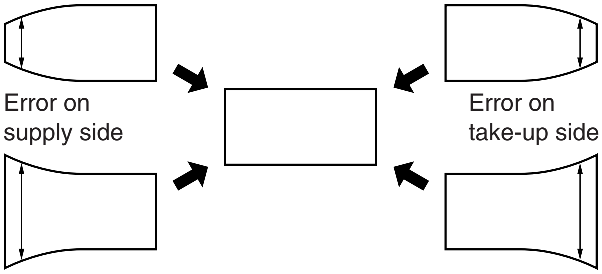
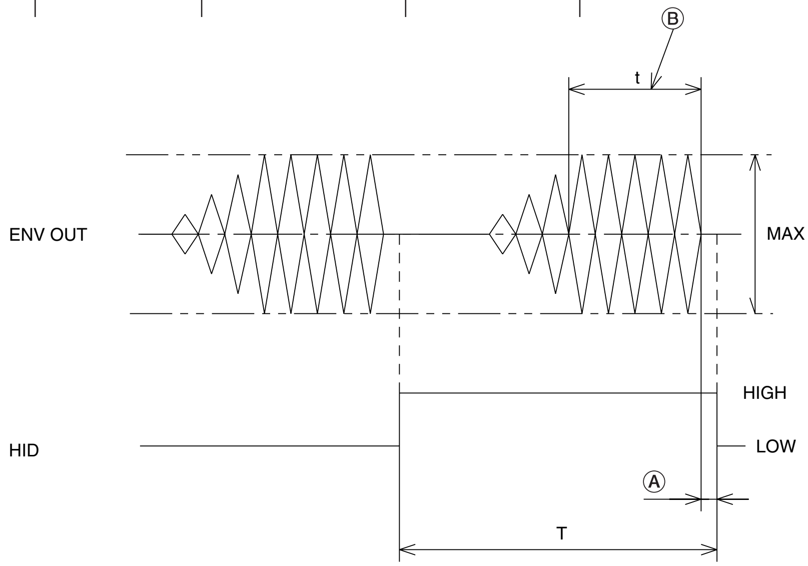


Fig. 2-12-6

No.	Item	Measuring instruments & Input signals	Mode	Measuring point (◎) Adjustment parts (↑) Adjustment level (☆)	Adjustment procedure
3	Waveform rise check	• Oscilloscope, alignment tape MC-1(NTSC) MC-2(PAL) Color bar portion	Eject →Play Search FWD →Play Search REV → Play	◎ TP9 ENV OUT [Rewrite board] ◎ TP5 HID [Rewrite board] ☆The envelope waveform should be restored within 1 sec.	(1) Switch the mode from Eject → Play and ensure that the envelope waveform is restored in less than 1 sec. (2) Switch the mode from Search FWD → Play and from Search REV → Play, and ensure that the envelope is restored in less than 1 sec. in both cases. (3) If the waveform does not restore in the specified period, fine-adjust the supply/take-up guide rollers as far as the envelope waveform specification is met, then restart checking from the above procedure 1 again.
4	Damage check	• Self-recorded/ played tape 60ME	Play ↓ Search REV ↓ Search FWD ↓ Play	◎ TP9 ENV OUT [Rewrite board] ◎ TP5 HID [Rewrite board] ☆The tape should not be damaged by wrinkle.	(1) Transport the self-recorded/played tape from the beginning by changing modes in order of Play → Search REV → Search FWD → Play, and ensure that wrinkles due to strong restriction by the guide rollers and guide pole are not produced on tape. (2) Perform the same check at the section near the end of tape. (3) Make sure that no tape damage occurs when a tape is being loaded, unloaded or ejected.
5	Envelope check during FF/REW	• Oscilloscope, alignment tape MC-1(NTSC) MC-2(PAL) Color bar portion	FF REW	◎ TP9 ENV OUT [Rewrite board] ◎ TP5 HID [Rewrite board] ☆Ⓐ > 55μsec. ☆Ⓑ ≧ T/3  **Fig. 2-12-7**	(1) Insert the alignment tape and enter Stop mode. (2) Enter FF mode. (3) Ensure that the envelope output is present at 55 μs before the HID switching timing. (4) Check the take-up side of the envelope to see that the MAX output duration is more than 1/3 the HID duration. **This checking should be done after completing the switching point adjustment.** (5) Enter REW mode and check the same items as (3) and (4) above. (6) If the envelope is out of specification, check the tension band and main brake assembly and replace as required. Confirm the playback switching point.

SECTION 3
ELECTRICAL ADJUSTMENTS

3.1 FUNCTIONS REQUIRED FOR ADJUSTMENTS, SETUP

3.1.1 General instruments necessary for adjustment

Instrument	Condition	Instrument	Condition
Oscilloscope	Calibrated instrument with a measuring bandwidth of 100 MHz or more.	Frequency counter	Instrument calibrated for 8 digits or more. Stability of 0.1 ppm or 1x10^{-7} or better is required at 0 to 40°C.
Vectorscope	Calibrated instrument		
Audio tester	Calibrated instrument	Monitor TV	Color video monitor with a 75Ω video input.

3.1.2 Special implements required for adjustment

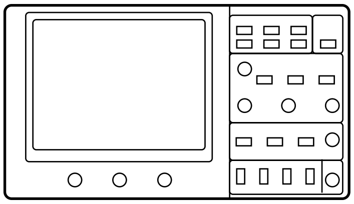
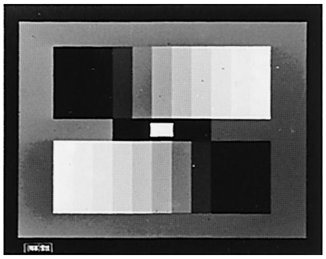
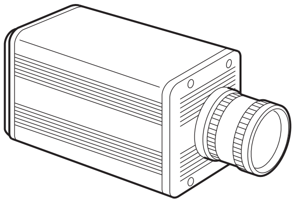
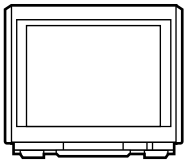
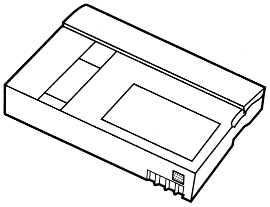
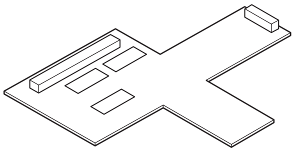
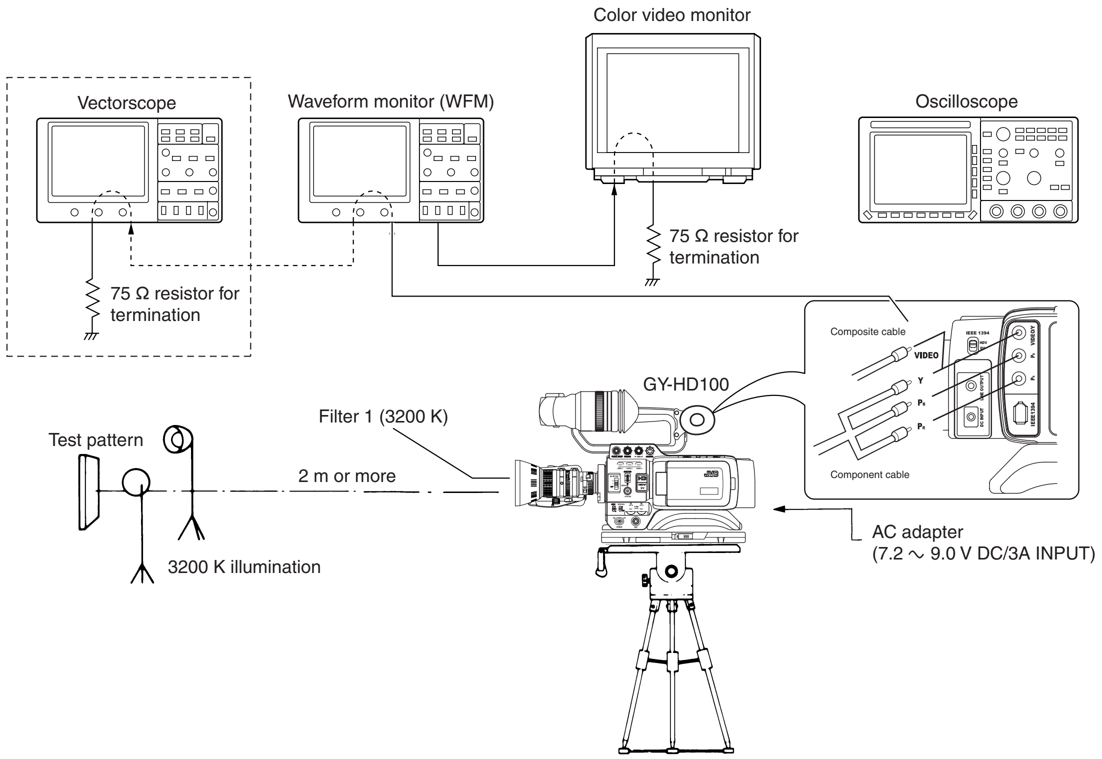
1 Waveform monitor (WFM)	2 Gray scale chart	3 Tripod base
	(Part No.:GS2L) 	Accessory (Model name : KA-551U)
4 Camera and lens	5 Monitor TV	6 Alignment tape
		MC-1 : NTSC MC-2 : PAL 
7 REWRITE board		
CK453800C 		

Fig. 3-1-1 Special implements required for adjustment

3.2 STANDARD SETUP


Color video monitor
Vectorscope
Waveform monitor (WFM)
Oscilloscope
75 Ω resistor for termination
75 Ω resistor for termination
Composite cable
VIDEO
Y
PB
PR
IEEE 1394
HDV
DV
VIDEO/Y
LINE OUTPUT
DC INPUT
IEEE1394
Component cable
GY-HD100
Filter 1 (3200 K)
Test pattern
2 m or more
3200 K illumination
AC adapter
(7.2 ~ 9.0 V DC/3A INPUT)

Adjustment items

For Camera-1 adjustment

No.	Item name	Adjustment value	Remarks
0	COUNTRY	U_E, I_EC	NTSC & PAL
1	VIDEO MODE CHANGE	NTSC, PAL	NTSC & PAL
2	27MHz CAM	0 to 255	NTSC
3	SENC SDRAM	-	NTSC & PAL
5	FPGA4 VD	0 to 7	NTSC & PAL
6	FPGA4 SDRAM	0 to 15	NTSC & PAL
10	Y LEVEL[COMPOSITE]	0 to 255	NTSC
11	C LEVEL	0 to 255	NTSC & PAL
12	Y LEVEL[COMPONENT]	0 to 255	NTSC
13	B-Y LEVEL	0 to 255	NTSC
14	R-Y LEVEL	0 to 255	NTSC
20	FPGA BLACK[B]	0 to 40	NTSC
21	FPGA BLACK[R]	0 to 40	NTSC
22	MASTER BLACK	0 to 40	NTSC
23	BLACK OFFSET[G]	0 to 63	NTSC & PAL
24	BLACK OFFSET[B]	0 to 63	NTSC & PAL
25	BLACK OFFSET[R]	0 to 63	NTSC & PAL
37	WHITE OFFSET[G]	100 to 143	NTSC & PAL
38	WHITE OFFSET[B]	100 to 143	NTSC & PAL
39	WHITE OFFSET[R]	100 to 143	NTSC & PAL
40	IN GAIN[G]	-	NTSC & PAL
41	IN GAIN[B]	-	NTSC
42	IN GAIN[R]	-	NTSC
43	FLARE[B]	0 to 40	NTSC
44	FLARE[R]	0 to 40	NTSC
45	MASTER FLARE	0 to 20	NTSC
46	CORING[G]L	0 to 63	NTSC & PAL
47	CORING[G]R	0 to 63	NTSC & PAL
48	CORING[B]L	0 to 63	NTSC & PAL
49	CORING[B]R	0 to 63	NTSC & PAL
50	CORING[R]L	0 to 63	NTSC & PAL
51	CORING[R]R	0 to 63	NTSC & PAL
52	BLACK SHADING[G]L	0 to 80	NTSC & PAL
53	BLACK SHADING[G]R	0 to 80	NTSC & PAL
54	BLACK SHADING[B]L	0 to 80	NTSC & PAL
55	BLACK SHADING[B]R	0 to 80	NTSC & PAL
56	BLACK SHADING[R]L	0 to 80	NTSC & PAL
57	BLACK SHADING[R]R	0 to 80	NTSC & PAL

For AUDIO adjustmnt

No.	Item name	Adjustment value	Remarks
60	AUDIO LEVEL[CH1]	-	NTSC
61	AUDIO LEVEL[CH2]	-	NTSC

For LCD & VF adjustment

No.	Item name	Adjustment value	Remarks
70	SUB-BRIGHT[B]	-	NTSC
71	SUB-BRIGHT[R]	-	NTSC
72	CONTRAST	100 to 160	NTSC
73	SUB-CONTRAST[B]	10 to 120	NTSC
74	SUB-CONTRAST[R]	10 to 120	NTSC
75	GAMMA-1	0 to 80	NTSC

For LCD & VF adjustment

No.	Item name	Adjustment value	Remarks
76	GAMMA-2	0 to 80	NTSC
77	PSIG BRIGHT	40 to 120	NTSC
78	COMMON DC	27 to 107	NTSC & PAL
79	HUE	35 to 95	NTSC
80	VCO FINE	0 to 255	NTSC & PAL
81	BLACK LIMITER	0 to 63	NTSC
82	VCO COARSE	1 to 7	NTSC & PAL
83	H-POSITION	2 to 31	NTSC & PAL
84	RESOLUTION	0 to 5	NTSC & PAL
85	VF SUB-BRIGHT[B]	27 to 107	NTSC
86	VF SUB-BRIGHT[R]	27 to 107	NTSC
87	VF CONTRAST	100 to160	NTSC
88	VF SUB-CONTRAST[B]	10 to 120	NTSC
89	VF SUB-CONTRAST[R]	10 to 120	NTSC
90	VF GAMMA-1	0 to 80	NTSC
91	VF GAMMA-2	0 to 80	NTSC
92	VF COM LEVEL	0 to 255	NTSC
93	VF COMMON DC	27 to 107	NTSC & PAL
94	VF HUE	35 to 95	NTSC
95	VF VCOL	0 to 255	NTSC & PAL
96	VF VCOH	0, 1	NTSC & PAL
97	VF H POSITION	0 to 79	NTSC & PAL
98	VF V POSITION	0 to 31	NTSC & PAL
99	VF RESOLUTION	0 to 5	NTSC & PAL

For DVC unit adjustment

No.	Item name	Adjustment value	Remarks
100	PB SW POINT	00000000 to FFFFFFFF	NTSC
101	ME REC CURRENT	0 to 255	NTSC
102	ME SP VCO	0000H to FFFFH	NTSC
103	FS PLL 48kHz	0 to 255	NTSC
104	FS PLL 44.1kHz	0 to 255	NTSC
105	FS PLL 32kHz	0 to 255	NTSC
106	27MHz VCO	0 to 255	NTSC
107	ATF GAIN	0 to 255	NTSC
108	AGC GAIN	0 to 255	NTSC
109	BGNEND SENS	0 to 255	NTSC
110	FWD TORQUE	0 to 255	NTSC

For CAMERA-2 adjustmnt

No.	Item name	Adjustment value	Remarks
200	AFE ALL RESET	CANCEL, EXECUTE	NTSC & PAL
201	H1 START[G]L	0 to 63	NTSC & PAL
202	H1 STOP[G]L	0 to 63	NTSC & PAL
203	H1 START[G]R	0 to 63	NTSC & PAL
204	H1 STOP[G]R	0 to 8	NTSC & PAL
205	RESET START[G]L	34 to 36	NTSC & PAL
206	RESET STOP[G]L	0 to 63	NTSC & PAL

For LCD & VF adjustment

No.	Item name	Adjustment value	Remarks
207	SHP PHASE[G]L	0 to 63	NTSC & PAL
208	SHD PHASE[G]L	0 to 63	NTSC & PAL
209	AD OUT PHASE[G]L	0 to 16	NTSC & PAL
210	RESET START[G]R	34 to 36	NTSC & PAL
211	RESET STOP[G]R	0 to 63	NTSC & PAL
212	SHP PHASE[G]R	0 to 63	NTSC & PAL
213	SHD PHASE[G]R	0 to 63	NTSC & PAL
214	AD OUT PHASE[G]R	0 to 63	NTSC & PAL
221	H1 START[B]L	0 to 63	NTSC & PAL
222	H1 STOP[B]L	0 to 63	NTSC & PAL
223	H1 START[B]R	0 to 63	NTSC & PAL
224	H1 STOP[B]R	0 to 8	NTSC & PAL
225	RESET START[B]L	34 to 36	NTSC & PAL
226	RESET STOP[B]L	0 to 63	NTSC & PAL
227	SHP PHASE[B]L	0 to 63	NTSC & PAL
228	SHD PHASE[B]L	0 to 63	NTSC & PAL
229	AD OUT PHASE[B]L	0 to 63	NTSC & PAL
230	RESET START[B]R	34 to 36	NTSC & PAL
231	RESET STOP[B]R	0 to 63	NTSC & PAL
232	SHP PHASE[B]R	0 to 63	NTSC & PAL
233	SHD PHASE[B]R	0 to 63	NTSC & PAL
234	AD OUT PHASE[B]R	0 to 63	NTSC & PAL
241	H1 START[R]L	0 to 63	NTSC & PAL
242	H1 STOP[R]L	0 to 63	NTSC & PAL
243	H1 START[R]R	0 to 63	NTSC & PAL
244	H1 STOP[R]R	0 to 8	NTSC & PAL
245	RESET START[R]L	34 to 36	NTSC & PAL
246	RESET STOP[R]L	0 to 63	NTSC & PAL
247	SHP PHASE[R]L	0 to 63	NTSC & PAL
248	SHD PHASE[R]L	0 to 63	NTSC & PAL
249	AD OUT PHASE[R]L	0 to 16	NTSC & PAL
250	RESET START[R]R	34 to 36	NTSC & PAL
251	RESET STOP[R]R	0 to 63	NTSC & PAL
252	SHP PHASE[R]R	0 to 63	NTSC & PAL
253	SHD PHASE[R]R	0 to 63	NTSC & PAL
254	AD OUT PHASE[R]R	0 to 63	NTSC & PAL
300	CLAMP ALL REST	CANCEL, EXECUTE	NTSC & PAL
301	CLAMP LEVEL[G]L	0 to 63	NTSC & PAL
302	CLAMP LEVEL[G]R	0 to 63	NTSC & PAL
303	CLAMP LEVEL[B]L	0 to 63	NTSC & PAL
304	CLAMP LEVEL[B]R	0 to 63	NTSC & PAL
305	CLAMP LEVEL[R]L	0 to 63	NTSC & PAL
306	CLAMP LEVEL[R]R	0 to 63	NTSC & PAL

3.3 ADJUSTMENT MENU

3.3.1 Switches and Functions Used in Adjustments

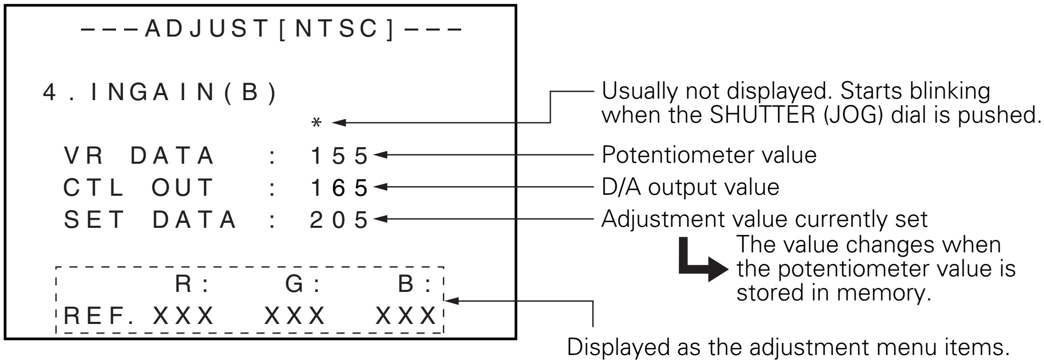
Most of the adjustment items employ microcomputer-controlled adjustments using electric potentiometers. The adjustment data is stored in EEPROM.

The switches used in the adjustments and their functions are as follows.

- MENU (STATUS) button : Press to start or exit from the adjustment menu.
- USER 1 , USER 2 : Press to select the adjustment item.
- JOG (SHUTTER) dial (rotate) : Rotate to adjust the selected item.
- JOG (SHUTTER) dial button (push in) : Press to start an adjustment and store the adjustment value in memory.

3.3.2 Procedure

(1) Turn the power ON, while holding the USER 1 and USER 2 buttons
(2) When the power is ON, press the MENU button to display the ADJUST MENU.
(3) Push the JOG dial button so that “*” blinks, and rotate the JOG dial to the specified value while observing the designated TP and measuring instrument. (In this mode, JOG dial rotate while holding the MENU button, then parameter value change quickly.)
(4) After completing the adjustment, push the JOG dial button to delete the “*” and store the adjustment value in memory. (If do not push the JOG dial button, adjustment value will not stored.)
(5) Press the USER 1 and USER 2 button to select the next item to adjust.
(6) Adjust for each item to do same procedure as above (3)(4).
(7) After completing all adjustments, press the MENU button to exit the ADJUST MENU.
(8) To return to normal operation mode, turn the power OFF and ON again.(If did not re-start camera power, camera will be still in ADJUST MODE, so if press the MENU button then ADJUST MENU indicate on the screen and will not indicate normal menu screen.)



```
 ---ADJUST[NTSC]---

4.INGAIN(B)
                  *
 VR DATA    :  155
 CTL OUT    :  165
 SET DATA   :  205

        R:    G:    B:
 REF. XXX   XXX   XXX
```

Usually not displayed. Starts blinking when the SHUTTER (JOG) dial is pushed.
Potentiometer value
D/A output value
Adjustment value currently set
The value changes when the potentiometer value is stored in memory.
Displayed as the adjustment menu items.

On-screen adjustment menu

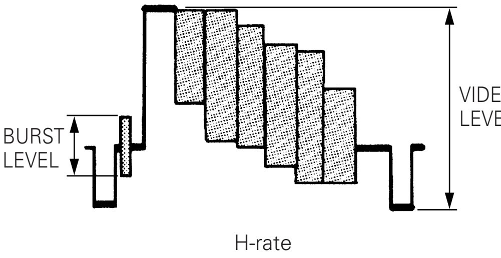
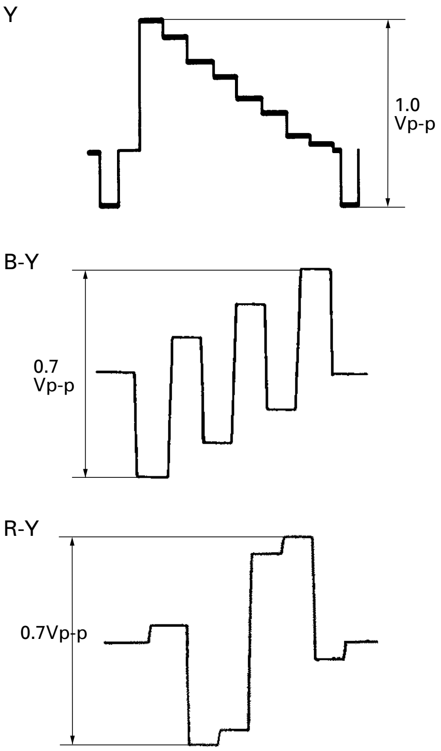
3.3.3 Adjustment mode

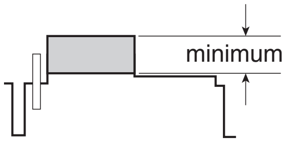
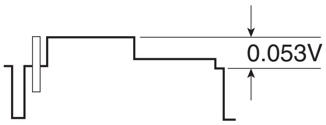
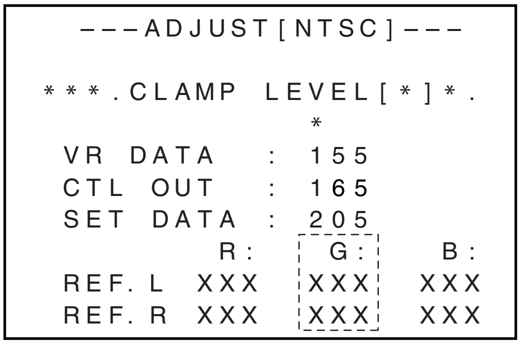
When setting to adjustment mode with the MENU setting status below, an adjustment mode that outputs PAL signal will be set.

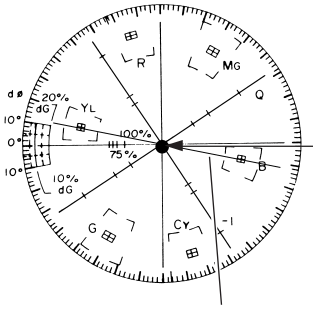
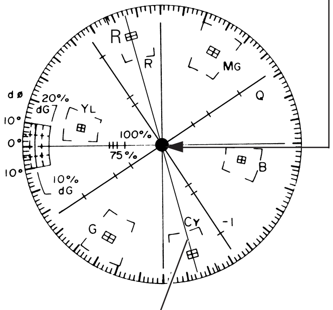
- FRAME RATE : 50/25
- REC : DV-50I

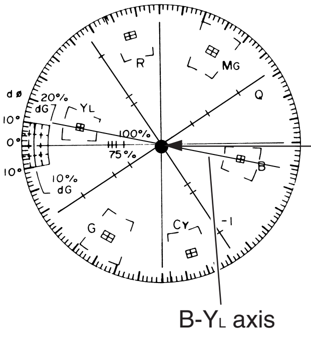
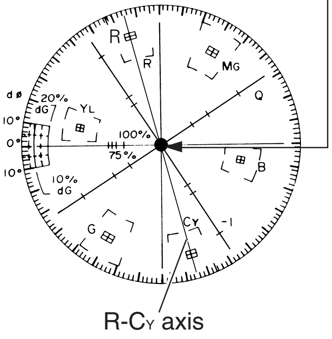
3.4 CAMERA ADJUSTMENTS

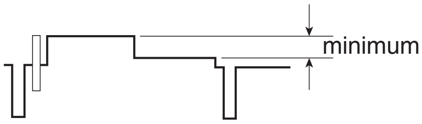
3.4.1 Camera adjustments

No.	Item	Measuring instruments & Input signals	Mode	Measuring point (◎) Adjustment parts (⇧) Adjustment level (☆)	Adjustment procedure
1	FH adjustment	Frequency counter	ADJUST MENU	◎ TP[FH] Rewrite board ⇧ JOG dial ☆ 27,000,000 ± 30Hz	(1) Press the USER 1/2 button to select ADJUST MENU No.2 "27MHz CAM".(Color bar signal will be output automatically) (2) Push the JOG dial button so that "*" blinks, and then rotate the JOG dial to adjust to the specified value. (3) Press the JOG dial to store the adjustment data.
2	ENCODER adjustment (COMPOSITE)  	Oscilloscope	ADJUST MENU	◎ VIDEO OUT ⇧ JOG dial ☆ VIDEO level 1.000Vp-p	(1) Press the USER 1/2 button to select ADJUST MENU No.10 "Y LEVEL (COMPOSITE)" . (2) Rotate the JOG dial to the specified value. (3) Press the JOG dial to store the adjustment data.
				◎ VIDEO OUT ⇧ JOG dial ☆ BURST level NTSC: 0.286 ± 0.015V PAL: 0.300 ± 0.015V	(4) Press the USER 1/2 button to select ADJUST MENU No.11 "LEVEL" . (5) Rotate the JOG dial to the specified value. (6) Press the JOG dial to store the adjustment data.
3	ENCODER adjustment (COMPONENT)  	Oscilloscope	ADJUST MENU	◎ Y OUT ⇧ JOG dial ☆ 1.000Vp-p	(1) Press the USER 1/2 button to select ADJUST MENU No.12 "Y LEVEL (COMPONENT)" . (2) Rotate the JOG dial to the specified value. (3) Press the JOG dial to store the adjustment data.
				◎ PB OUT ⇧ JOG dial ☆ B-Y level 0.700 Vp-p	(4) Press the USER 1/2 button to select ADJUST MENU No.13 "B-Y (COMPONENT) LEVEL". (5) Rotate the JOG dial to adjust to the specified value. (6) Press the JOG dial to store the adjustment data.
				◎ PR OUT ⇧ JOG dial ☆ R-Y level 0.700 Vp-p	(7) Press the USER 1/2 button to select ADJUST MENU No.14 "R-Y LEVEL (COMPONENT)". (8) Rotate the JOG dial to adjust to the specified value. (9) Press the JOG dial to store the adjustment data.

No.	Item	Measuring instruments & Input signals	Mode	Measuring point (◎) Adjustment parts (⇧) Adjustment level (☆)	Adjustment procedure
4	BLACK adjustment	Oscilloscope 	ADJUST MENU	◎ VIDEO OUT ⇧ JOG dial ☆ Minimize the carrier leak	(1) Press the USER 1/2 button to select ADJUST MENU No.20 "FPGA BLACK (B)". (2) Rotate the JOG dial to adjust to the specified value. (3) Press the JOG dial to store the adjustment data.
				◎ VIDEO OUT ⇧ JOG dial ☆ Minimize the carrier leak	(4) Then, Press the USER 1/2 button to select ADJUST MENU No.21 "FPGA BLACK (R)". (5) Rotate the JOG dial to adjust to the specified value. (6) Press the JOG dial to store the adjustment data.
	MASTER BLACK adjustment	Oscilloscope 	ADJUST MENU	◎ VIDEO OUT ⇧ JOG dial ☆ 0.053 ± 0.007V	(7) Then, press the USER 1/2 button to select ADJUST MENU No.22 "MASTER BLACK". (8) Rotate the JOG dial to adjust black level to the specified value. **NOTE:** **At first, set the level over than the specified value.** **And adjust the level of left side becomes equal to the specified value.** (9) Press the JOG dial to store the adjustment data.
				◎ VIDEO OUT ☆ Less than 0.03Vp-p	(10) Check the CHROMA signal to confirm that the carrier leakage should be specified level.
5	CLAMP LEVEL adjustmen	Lens cap  ---ADJUST[NTSC]--- ***.CLAMP LEVEL[*]*. * VR DATA : 155 CTL OUT : 165 SET DATA : 205 R: G: B: REF. L XXX XXX XXX REF. R XXX XXX XXX	ADJUST MENU	◎ LCD monitor ⇧ JOG dial ☆ [G] L Ref.: 127 or 128	(1) Press the USER 1/2 button to select ADJUST MENU No. 301 "CLAMP LEVEL[G]L". (2) Rotate the JOG dial to the specified value. (3) Press the JOG dial to store the adjustment data.
				◎ LCD monitor ⇧ JOG dial ☆ [G] L Ref.: 127 or 128	(4) Press the USER 1/2 button to select ADJUST MENU No. 302 "CLAMP LEVEL[G]R". (5) Rotate the JOG dial to the specified value. (6) Press the JOG dial to store the adjustment data.

No.	Item	Measuring instruments & Input signals	Mode	Measuring point (◎) Adjustment parts (⇧) Adjustment level (☆)	Adjustment procedure
	---ADJUST[NTSC]--- ***.CLAMP LEVEL[*]*. * VR DATA : 155 CTL OUT : 165 SET DATA : 205 R: G: B: REF. L XXX XXX XXX REF. R XXX XXX XXX			◎ LCD monitor ⇧ JOG dial ☆ [B] L Ref.: 127 or 128	(7) Press the USER 1/2 button to select ADJUST MENU No. 303 "CLAMP LEVEL[B]L". (8) Rotate the JOG dial to the specified value. (9) Press the JOG dial to store the adjustment data.
				◎ LCD monitor ⇧ JOG dial ☆ [B] R Ref.: 127 or 128	(10) Press the USER 1/2 button to select ADJUST MENU No. 304 "CLAMP LEVEL[B]R". (11) Rotate the JOG dial to the specified value. (12) Press the JOG dial to store the adjustment data.
	---ADJUST[NTSC]--- ***.CLAMP LEVEL[*]*. * VR DATA : 155 CTL OUT : 165 SET DATA : 205 R: G: B: REF. L XXX XXX XXX REF. R XXX XXX XXX			◎ LCD monitor ⇧ JOG dial ☆ [R] L Ref.: 127 or 128	(13) Press the USER 1/2 button to select ADJUST MENU No. 305 "CLAMP LEVEL[R]L". (14) Rotate the JOG dial to the specified value. (15) Press the JOG dial to store the adjustment data.
				◎ LCD monitor ⇧ JOG dial ☆ [R] R Ref.: 127 or 128	(16) Press the USER 1/2 button to select ADJUST MENU No. 306 "CLAMP LEVEL[R]R". (17) Rotate the JOG dial to the specified value. (18) Press the JOG dial to store the adjustment data.
6	IN GAIN adjustment	Vectorscope Gray scale chart	ADJUST MENU	◎ LCD display ⇧ Lens Iris ☆ [G] Ref.: 370 ± 5	(1) While shooting the gray scale chart, set the Lens iris so that the [G] ref. data is specified value.
		 R MG Q YL B CY G -I 100% 75% 20% dG 10% dG dø 10° 0° 10° B-YL axis		◎ VIDEO OUT ⇧ JOG dial ☆ Position the noise on the B-YL axis at the center of the Vectorscope	(2) Press the USER 1/2 button to select ADJUST MENU No. 41 "IN GAIN(B)". (3) Rotate the JOG dial to the specified value. (4) Press the JOG dial to store the adjustment data.
				◎ VIDEO OUT ⇧ JOG dial ☆ Position the noise on the R-CY axis at the center of the Vectorscope	(5) Press the USER 1/2 button to select ADJUST MENU No. 42 "IN GAIN(R)". (6) Rotate the JOG dial to the specified value. (7) Press the JOG dial to store the adjustment data.
		 R MG Q YL B CY G -I 100% 75% 20% dG 10% dG dø 10° 0° 10° R-CY axis		◎ VIDEO OUT ⇧ JOG dial ☆ Position the noise at the center of the Vectorscope carrier leak: less than 0.03V	(8) Repeat the adjustment from (1) to (6) avobe, adjust such that the position the noise becomes center of the Vectorscope. (9) Check the carrier leak of white window portion is specified value.

No.	Item	Measuring instruments & Input signals	Mode	Measuring point (◎) Adjustment parts (⇧) Adjustment level (☆)	Adjustment procedure
7	FLARE adjustment	Vectorscope Gray scale chart	ADJUST MENU	◎ LCD display ⇧ Lens Iris ☆ Video level: 200%	(1) While shooting the gray scale chart, set the Lens iris so that the [G] ref. data is 370 ± 5. (2) Then, open the Lens iris by one step.
		 dø 20% dG YL R MG Q 100% 75% B 10° 0° 10° 10% dG G CY -I B-YL axis		◎ VIDEO OUT ⇧ JOG dial ☆ Position the noise on the $B\text{-}Y_L$ axis at the center of the Vectorscope	(3) Press the USER 1/2 button to select ADJUST MENU No. 43 "FPGA FRARE(B)". (4) Rotate the JOG dial to the specified value. (5) Press the JOG dial to store the adjustment data.
		 dø 20% dG YL R R MG Q 100% 75% B 10° 0° 10° 10% dG G CY -I R-CY axis		◎ VIDEO OUT ⇧ JOG dial ☆ Position the noise on the $R\text{-}C_Y$ axis at the center of the Vectorscope	(6) Press the USER 1/2 button to select ADJUST MENU No. 44 "FPGA FRARE(R)". (7) Rotate the JOG dial to the specified value. (8) Press the JOG dial to store the adjustment data.
				◎ VIDEO OUT ⇧ JOG dial ☆ Position the noise at the center of the Vectorscope carrier leak: less than 0.03V	(9) Repeat the adjustment from (3) to (8) avobe, adjust such that the position the noise becomes center of the Vectorscope. (10) Check the carrier leak of white black portion is specified value.
8	MASTER FRARE adjustment	–	ADJUST MENU	◎ LCD display ⇧ JOG dial ☆ VR DATA: 15	(1) Press the USER 1/2 button to select ADJUST MENU No. 45 "MASTER FRARE(B)". (2) Rotate the JOG dial to the specified value. (3) Press the JOG dial to store the adjustment data.
9	COREING [G] adjustment	Oscilloscope	ADJUST MENU	◎ VIDEO OUT ⇧ JOG dial ☆ Noise level on the left and right sides of the screen should have same.	(1) Press the USER 1/2 button to select ADJUST MENU No. 46 "COREING[G]L" or ADJUST MENU No. 47 "COREING[G]R". (2) Rotate the JOG dial to the specified value. (3) Press the JOG dial to store the adjustment data.
10	COREING [B] adjustment	Oscilloscope	ADJUST MENU	◎ VIDEO OUT ⇧ JOG dial ☆ Noise level on the left and right sides of the screen should have same.	(1) Press the USER 1/2 button to select ADJUST MENU No. 48 "COREING[B]L" or ADJUST MENU No. 49 "COREING[B]R". (2) Rotate the JOG dial to the specified value. (3) Press the JOG dial to store the adjustment data.
11	COREING [R] adjustment	Oscilloscope	ADJUST MENU	◎ VIDEO OUT ⇧ JOG dial ☆ Noise level on the left and right sides of the screen should have same.	(1) Press the USER 1/2 button to select ADJUST MENU No. 50 "COREING[R]L" or ADJUST MENU No. 51 "COREING[R]R". (2) Rotate the JOG dial to the specified value. (3) Press the JOG dial to store the adjustment data.

No.	Item	Measuring instruments & Input signals	Mode	Measuring point (◎) Adjustment parts (⇧) Adjustment level (☆)	Adjustment procedure
12	BLACK L/R OFFSET adjustment	Oscilloscope	ADJUST MENU	◎ VIDEO OUT ⇧ JOG dial ☆ The black level on the left and right side of the screen should have same level	(1) Press the USER 1/2 button to select ADJUST MENU No. 23 “BLACK OFFSET (G)”. (2) Rotate the JOG dial to the specified value. (3) Press the JOG dial to store the adjustment data.
		Oscilloscope  	ADJUST MENU	◎ VIDEO OUT ⇧ JOG dial ☆ The black level on the left and right side of the screen should have same level	(4) Press the USER 1/2 button to select ADJUST MENU No. 24 “BLACK OFFSET (B)”. (5) Rotate the JOG dial to the specified value. (6) Press the JOG dial to store the adjustment data.
				◎VIDEO OUT ⇧ JOG dial ☆ The black level on the left and right side of the screen should have same level	(7) Press the USER 1/2 button to select ADJUST MENU No. 25 “BLACK OFFSET (R)”. (8) Rotate the JOG dial to the specified value. (9) Press the JOG dial to store the adjustment data.
				◎ VIDEO OUT ⇧ JOG dial ☆ The black level on the left and right side of the screen should have same level	(10) Repeat the adjustment from (4) to (9) above, adjust such that the right and left sides of the vectorscope become equal.
13	CROSS TALK adjustment	Monitor TV Point light source (incandescent lamp of more than 40W)	ADJUST MENU	◎ VIDEO OUT ⇧ JOG dial ☆ The level at the edge on the right screen should not be obvious.	(1) Press the USER 1/2 button to select ADJUST MENU No. 249 "AD OUTPUT PHASE (R)L". (2) Set to a dark background and take photo such that the point light source appears on the left of the screen. (3) Rotate the JOG dial to the specified value. (4) Press the JOG dial to store the adjustment data.

No.	Item	Measuring instruments & Input signals	Mode	Measuring point (◎) Adjustment parts (⇧) Adjustment level (☆)	Adjustment procedure
14	WHITE L/R OFFSET [G]	Oscilloscope Gray scale chart	ADJUST MENU	◎ VIDEO OUT ⇧ Lens IRIS ☆ Video level : 0.98 V (95IRE)	(1) Adjust the lens iris so that the white level on the gray scale chart is specified value.
		Oscilloscope Monitor TV	ADJUST MENU	◎ VIDEO OUT ⇧ JOG dial	(2) Press the USER 1/2 button to select ADJUST MENU No. 37 "WHITE OFFSET (G)". (3) Rotate the JOG dial to the specified value. (4) Press the JOG dial to store the adjustment data.
	LINEARITY adjustment	Oscilloscope Gray scale chart	ADJUST MENU	◎ VIDEO OUT ⇧ Lens IRIS ☆ The level difference between left and right should be maximum	(1) Press the USER 1/2 button to select ADJUST MENU No. 205 "RESET START (G)L". (2) While shooting the gray scale chart, set the Lens iris so that the video out level is specified value.
				◎ VIDEO OUT ⇧ JOG dial ☆ The step levels of left and right should be the same.	(3) Rotate the JOG dial to the specified value. (4) Press the JOG dial to store the adjustment data. **NOTE:** **When the adjustment cannot be made, change the value of ADJUST MENU No. 210 "RESET START [G]R", readjust (1) to (4) such that the level difference becomes minimum.**
					(5) When the adjustments of No. WHITE OFFSET and No. LINEARITY cannot be made, change the setting of ADJUST MENU No. 204 "H1 STOP (G)R" to the sequence as shown below and readjust the 2 adjustments above. Initial setting "5" → "6" → "7" → "4".

No.	Item	Measuring instruments & Input signals	Mode	Measuring point (◎) Adjustment parts (⇧) Adjustment level (☆)	Adjustment procedure
15	WHITE L/R OFFSET [B]	Oscilloscope Gray scale chart	ADJUST MENU	◎ VIDEO OUT ⇧ Lens IRIS ☆ Adjust such that the 100 % white portion of the color bar and the white portion of the gray scale have same level.	(1) Adjust the lens iris so that the white level on the gray scale chart is specified value.
		Oscilloscope Monitor TV	ADJUST MENU	◎ VIDEO OUT ⇧ JOG dial ☆ Eliminate the gap of the H rate output waveform, and no line should be seen at the center of the monitor TV screen.	(2) Press the USER 1/2 button to select ADJUST MENU No. 38 “WHITE OFFSET (B)”. (3) Rotate the JOG dial to the specified value. (4) Press the JOG dial to store the adjustment data.
	LINEARITY adjustment	Oscilloscope Gray scale chart	ADJUST MENU	◎ VIDEO OUT ⇧ Lens Iris ☆ The level difference between left and right should be maximum	(1) Press the USER 1/2 button to select ADJUST MENU No. 225 "RESET START (B)L". (2) While shooting the gray scale chart, set the Lens iris so that the video out level is specified value.
				◎ VIDEO OUT ⇧ JOG dial ☆ The step levels of left and right should be the same.	(3) Rotate the JOG dial to the specified value. (4) Press the JOG dial to store the adjustment data. **NOTE:** **When the adjustment cannot be made, change the value of ADJUST MENU No. 230 "RESET START [B]R", readjust (1) to (4) such that the level difference becomes minimum.**
					(5) When the adjustments of No. WHITE OFFSET and No. LINEARITY cannot be made, change the setting of ADJUST MENU No. 224 "H1 STOP (G)R" to the sequence as shown below and readjust the 2 adjustments above. Initial setting "5" → "6" → "7" → "4".

No.	Item	Measuring instruments & Input signals	Mode	Measuring point (◎) Adjustment parts (⇧) Adjustment level (☆)	Adjustment procedure
16	WHITE L/R OFFSET [R]	Oscilloscope Gray scale chart	ADJUST MENU	◎ VIDEO OUT ⇧ Lens IRIS ☆ Adjust such that the 100 % white portion of the color bar and the white portion of the gray scale have same level.	(1) Adjust the lens iris so that the white level on the gray scale chart is specified value.
		Oscilloscope Monitor TV	ADJUST MENU	◎ VIDEO OUT ⇧ JOG dial ☆ Eliminate the gap of the H rate output waveform, and no line should be seen at the center of the monitor TV screen.	(2) Press the USER 1/2 button to select ADJUST MENU No. 39 “WHITE OFFSET (R)”. (3) Rotate the JOG dial to the specified value. (4) Press the JOG dial to store the adjustment data.
	LINEARITY adjustment	Oscilloscope Gray scale chart	ADJUST MENU	◎ VIDEO OUT ⇧ Lens Iris ☆ The level difference between left and right should be maximum	(1) Press the USER 1/2 button to select ADJUST MENU No. 245 "RESET START (R)L". (2) While shooting the gray scale chart, set the Lens iris so that the video out level is specified value. **NOTE:** **When the adjustment cannot be made, change the value of ADJUST MENU No. 250 "RESET START [R]R", readjust (1) to (4) such that the level difference becomes minimum.**
				◎ VIDEO OUT ⇧ JOG dial ☆ The step levels of left and right should be the same.	(3) Rotate the JOG dial to the specified value. (4) Press the JOG dial to store the adjustment data.
					(5) When the adjustments of No. WHITE OFFSET and No. LINEARITY cannot be made, change the setting of ADJUST MENU No. 244 "H1 STOP (G)R" to the sequence as shown below and readjust the 2 adjustments above. Initial setting "5" → "6" → "7" → "4".

No.	Item	Measuring instruments & Input signals	Mode	Measuring point (◎) Adjustment parts (⍏) Adjustment level (☆)	Adjustment procedure

3.4.2 AUDIO adjustment

Audio adjustments are required to input the test signal from LINE input.
All switches and VR's should be set the position as below table.

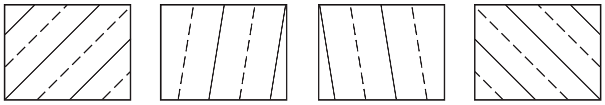
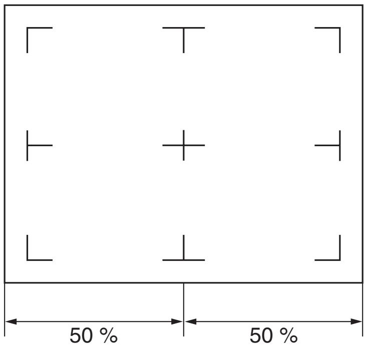
AUDIO INPUT (INPUT1/INPUT2)	: LINE	AUDIO MODE (MENU)	: 48k
CH2 INPUT	: INPUT 2	AUDIO SELECT	: MANUAL
AUDIO REF.LEVEL (MENU)	: –20dB	MONITOR SELECT	: BOTH
OUTPUT CHARACTOR (MENU)	: ON	WIND CUT (MENU)	: OFF
TEST TONE (MENU)	: OFF		

1	INPUT LEVEL setting	Audio tester 1KHz/+4dBs	Camera mode	◎ LINE OUT ⍏ AUDIO LEVEL VR ☆ -8dBs	(1) Input the test signal (1KHz /+4dBs) to the LINE input, adjust the adjustment point to the specified level.
2	Audio level meter adjustment	1KHz/+4dBs	Camera mode LCD should be Spread indication ADJUST MENU No.60 : AUDIO LEVEL (CH-1) No.61 : AUDIO LEVEL (CH-2)	◎ LCD MONITOR (Audio level meter) ⍏ Auto adjustment ☆ -20dBs	(1) This adjustment item should be do after complete the INPUT LEVEL setting. (2) Press the USER 1/2 button to select ADJUST MENU No.60 "AUDIO LEVEL (CH1)". (3) Press the JOG dial to display (blink) the * mark on the adjustment screen. (4) Press the JOG dial again to clear the * mark display. (5) Press the USER1 button to select ADJUST MENU No.61 "AUDIO LEVEL (CH2). (6) Perform the adjustment using steps same as (3) and (4) above. (7) Turn off the power once and turn it on again. (8) Press the DISPLAY button to select enlarged display for the LCD level meter. (9) Check that the LCD level meter is lit to the level of –20dB.

No.	Item	Measuring instruments & Input signals	Mode	Measuring point (◎) Adjustment parts (⇧) Adjustment level (☆)	Adjustment procedure

3.4.3 MONITOR LCD adjustment

For the MONITOR LCD adjustment, the following adjustment are required only. Other adjustment items should be default value.

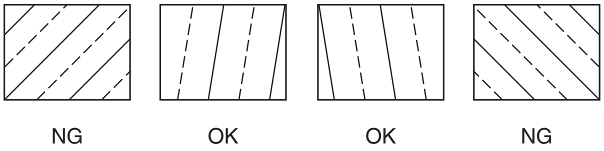
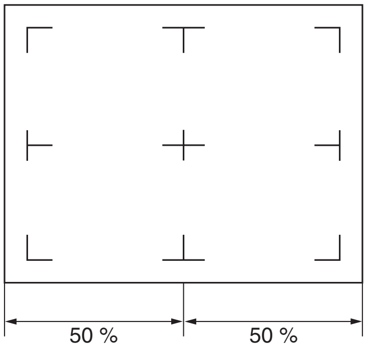
1	COMMON DC adjustment	—	ADJUST MENU	◎ MONITOR LCD ⇧ JOG dial ☆ Minimize the flicker	(1) Press the USER 1/2 button to select ADJUST MENU No.78,"COMMON DC". (2) Set the MONITOR LCD to field invert mode, rotate the JOG dial to adjust to the specified level. (3) Press the JOG dial to store the adjustment data.
2	VCO adjustment	—  	ADJUST MENU	◎ MONITOR LCD ⇧ JOG dial ☆ Most stable point for monitor screen	(1) Press the USER 1/2 button to select ADJUST MENU No.80."VCO FINE". (2) Rotate the JOG dial to adjust to the specified level. **NOTE:** **If adjustment cannot be done, change ADJUST MENU No. 82 "VCO COARSE" to 3 or 5 and readjust.** (3) Press the JOG dial to store the adjustment data.
3	H-POSITION adjustment	Gray scale chart  	ADJUST MENU	◎ MONITOR LCD ⇧ JOG dial ☆ Screen centering	(1) Press the USER 1/2 button to select ADJUST MENU No.83,"H POSITION". (2) Rotate the JOG dial to adjust the marker to horizontal center of the screen. (3) Press the JOG dial to store the adjustment data.

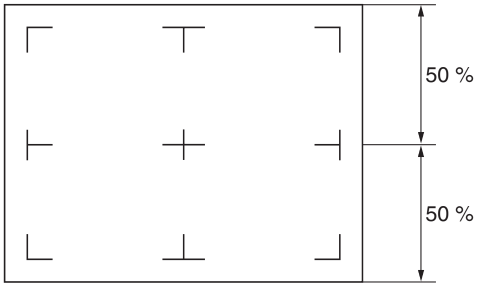
No.	Item	Measuring instruments & Input signals	Mode	Measuring point (◎) Adjustment parts (⏀) Adjustment level (☆)	Adjustment procedure
4	SUB BRIGHT adjustment	Oscilloscope		◎ LCD display ☆ Y level Should be 200 mV ~ 400 mV.	(1) Shoot the LCD Screen using other cameras. (2) Check the camera output taken from the LCD Screen using a oscilloscope. (3) Check that the minimum level is above 200 mV and the maximum level is above 400 mV.
		Vectorscope	ADJUST MENU	◎LCD display ⏀ JOG dial ☆ Position the noise on the B-YL axis at the center of the vectorscope.	(4) Press the USER 1/2 button to select ADJUST MENU No. 70 "SUB BRIGHT (B)". (5) Rotate the JOG dial to the specified value. (6) Press the JOG dial to store the adjustment data.
				◎LCD display ⏀ JOG dial ☆ Position the noise on the R-CY axis at the center of the vectorscope.	(7) Press the USER 1/2 button to select ADJUST MENU No. 71 "SUB BRIGHT (R)". (8) Rotate the JOG dial to the specified value. (9) Press the JOG dial to store the adjustment data.
				◎LCD display ⏀ JOG dial ☆ Position the noise at the center of the vectorscope.	(10) Repeat the adjustment from (4) to (9) above, adjust such that the right and left sides of the vectorscope become equal.

No.	Item	Measuring instruments & Input signals	Mode	Measuring point (◎) Adjustment parts (↑) Adjustment level (☆)	Adjustment procedure

3.4.4 VIEWFINDER adjustment

For the VIEWFINDER adjustment, the following adjustment are required only. Other adjustment items should be default value.

1	VF COMMON DC adjustment		ADJUST MENU	◎ VIEWFINDER ↑ JOG dial ☆ Minimize the flicker	(1) Press the USER 1/2 button to select ADJUST MENU No.93,"VF COMMON DC". (2) Rotate the JOG dial to adjust to the specified level. (3) Press the JOG dial to store the adjustment data.
2	VF VCO adjustment		ADJUST MENU	◎ VIEWFINDER ↑ JOG dial ☆ Most stable point for monitor screen	(1) Press the USER 1/2 button to select ADJUST MENU No.95."VF VCO L". (2) Rotate the JOG dial to adjust to the specified level. **NOTE: If adjustment cannot be done, change ADJUST MENU No. 96 "VF VCO H" to 3 or 5 and readjust.** (3) Press the JOG dial to store the adjustment data.
3	VF H-POSITION adjustment	Gray scale chart 	ADJUST MENU	◎ VIEWFINDER ↑ JOG dial ☆ Screen centering	(1) Press the USER 1/2 button to select ADJUST MENU No.97,"VF H POSITION". (2) Rotate the JOG dial to adjust the marker to horizontal center of the screen. (3) Press the JOG dial to store the adjustment data.

No.	Item	Measuring instruments & Input signals	Mode	Measuring point (◎) Adjustment parts (⇧) Adjustment level (☆)	Adjustment procedure
4	VF V-POSITION adjustment	Gray scale chart  	ADJUST MENU	◎ VIEWFINDER ⇧ JOG dial ☆ Screen centering	(1) Press the USER 1/2 button to select ADJUST MENU No.98 "VF V POSITION". (2) Shooting the Grey scale chart and rotate the JOG dial to adjust the white part in the middle of Grayscale so that it is at the center of the screen. (3) Press the JOG dial to store the adjustment data.
5	VF SUB BRIGHT adjustment	Oscilloscope		◎ View Finder ⇧ VF BRIGHT level ☆ Y level The maximum level should be 500 mV.	(1) Shoot the View Finder using other cameras. (2) Check the camera output taken from the View Finder using a oscilloscope. (3) Check that the maximum level is shown around the center of V rate. (4) Adjust such that the maximum level is above 500 mV.
		Vectorscope	ADJUST MENU	◎ View Finder ⇧ JOG dial ☆ Position the noise on the B-YL axis at the center of the vectorscope.	(5) Press the USER 1/2 button to select ADJUST MENU No. 85 "VF SUB BRIGHT (B)". (6) Rotate the JOG dial to the specified value. (7) Press the JOG dial to store the adjustment data.
				◎ View Finder ⇧ JOG dial ☆ Position the noise on the R-CY axis at the center of the vectorscope.	(8) Press the USER 1/2 button to select ADJUST MENU No. 86 "VF SUB BRIGHT (R)". (9) Rotate the JOG dial to the specified value. (10) Press the JOG dial to store the adjustment data.
				◎ View Finder ⇧ JOG dial ☆ Position the noise at the center of the vectorscope.	(11) Repeat the adjustment from (5) to (10) above, adjust such that the right and left sides of the vectorscope become equal.

3.5 DVC UNIT ADJUSTMENTS

Preparation : Connect the Rewrite board (CK453800C) to CN801 on the DBCD board. Connect it in the orientation shown in Fig. 3.4, so that the test point surface (component mounting surface) faces upward.

> **NOTE:**
> **When adjusting this item, set the MODE switch to VTR.**

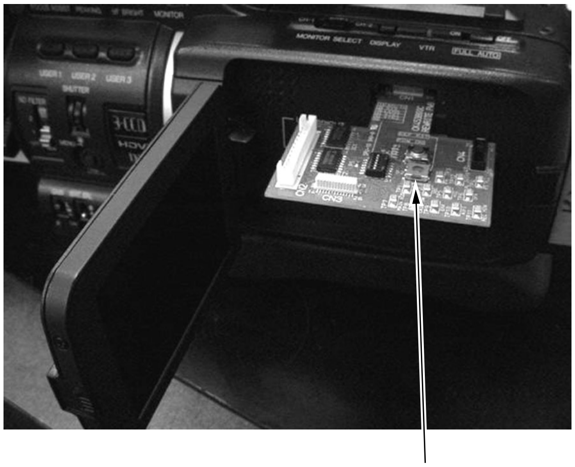
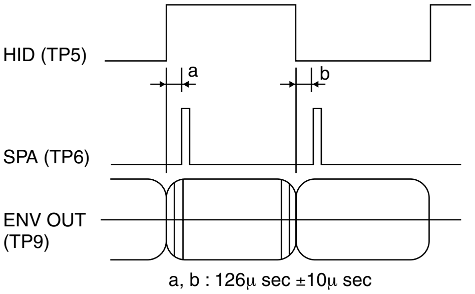
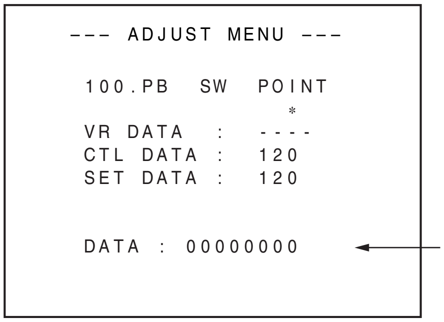
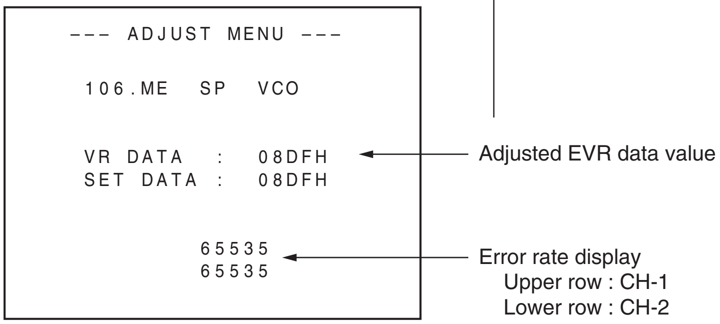


Fig. 3.4 Rewrite board connection method

No.	Item	Measuring instruments & Input signals	Mode	Measuring point (◎) Adjustment parts (⇧) Adjustment level (☆)	Adjustment procedure
1	PB switching point adjustment  HID (TP5) a b SPA (TP6) ENV OUT (TP9) a, b : 126μ sec ±10μ sec	Alignment tape, NTSC : MC-1, PAL : MC-2 color bar recorded section	• PLAY • ADJUST MENU, 100. PB SW POINT	◎ TP6 (SPA) ◎ TP9 (ENV OUT) TRIG: TP5 (HID) GND: TP1 (GND) [Rewrite board] ⇧ Auto adjustment ☆ a, b = 126 μs sec ± 10 μs sec	(1) Press the EDIT USER 1/2 button to select ADJUST MENU No. 100, "PB SW POINT". (2) Play the alignment tape. Ensure that the compatibility adjustment has been performed and the FM waveform at TP9 (ENV OUT) is flat and stable. (3) Press the JOG dial to cause the * marking to blink. The PB switching point will be adjusted automatically.
	 --- ADJUST MENU --- 100.PB SW POINT * VR DATA : ---- CTL DATA : 120 SET DATA : 120 DATA : 00000000 Rotate the JOG dial to display data. After displaying the data, press the JOG dial to complete the adjustment.				(4) Measure TP6 (SPA) by triggering TP5 (HID) and confirm that the values a and b are within the specified ranges. (5) Rotate the JOG dial to display the adjustment data in the "DATA:" field. (The DATA value should not be 00000000 or FFFFFFFF.) (6) Press the [JOG] button so that the * marking stops blinking. Now the adjustment is complete. **NOTE:** **Make sure that the data value is displayed before pressing the JOG dial. If this adjustment is completed before the data value is displayed the adjustment value will not be put into the memory.**

No.	Item	Measuring instruments & Input signals	Mode	Measuring point (◎) Adjustment parts (⇧) Adjustment level (☆)	Adjustment procedure
2	ME SP VCO [Error rate adjustment]	Oscilloscope Self-recording tape	• Self-REC/ PLAY • ADJUST MENU No.102	◎ TP2 (SBE) [REWRITE BOARD] ⇧ JOG dial ☆ Minimum error rate, which should be = 498 or less (per CH)	Note: **• Be sure to use a brand-new tape for this adjustment.** **• Be sure to clean the drum with a head cleaning tape before adjustment.** **• The error rate should be mesured with the Viterbi OFF. The Viterbi is set to OFF automatically when the adjustment mode is entered.** (1) Prior to the procedure below, prepare self-recording tape. (2) Select "102. ME SP VCO" adjustment. (3) Play back the self recording tape, and decrease the VR DATA to make the SBE waveform abnormal. (Fig. 3.5.2(2)) (Pressing the [STATUS] button simultaneously with the JOG dial varies the adjustment value by ±10 steps) (4) Increase the adjustment VR DATA little by little, and define the point where the SBE waveform becomes normal as value "A". (Fig. 3.5.2(3)) (5) Increase the adjustment VR DATA to make the SBE waveform abnormal. (Fig. 3.5.2(2)) (6) Decrease the adjustment VR DATA little by little, and define the point where the SBE waveform becomes normal as "B". (Fig. 3.5.2(3)) (7) Calculate the intermediate value "C" between the point A and the point B, and set the value C. (Since the adjustment values are hex number, use a functional computation-capable calculator or the PC calculator provided in Accessories.) **Setting value C=(A+B)/2** (8) Confirm that the error rate value is 498 or less in each channel. (9) Check the tolerance of adjustment. Shift the adjustment value against the setting value by ±60h. Conform that the error rate is 3,000 or less in each channel. When the error rate is over 3,000, recheck the adjustment procedure from (4). (For example, when the adjustment value is "9ED", ±60h is "A4D" and "98D". So, shift the value to "A4D" and "98D", and check the tolerance of error rate adjustment.) (10) Return the adjustment value to the setting value C, and Press the JOG dial to store the adjustment data.



```
--- ADJUST MENU ---

106.ME  SP  VCO

VR DATA   :  08DFH
SET DATA  :  08DFH

          65535
          65535
```

Fig. 3.5.2 (1) SP VCO Menu

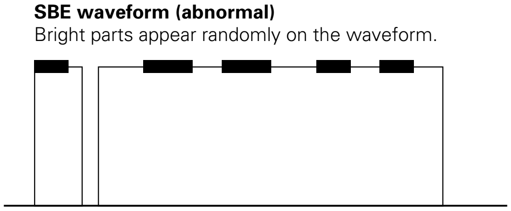


Fig. 3.5.2 (2)

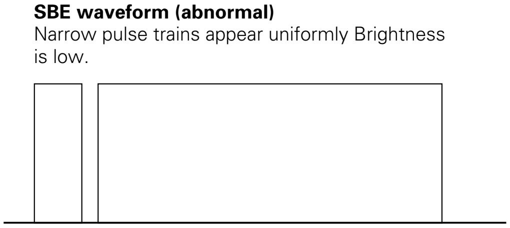


Fig. 3.5.2 (3)

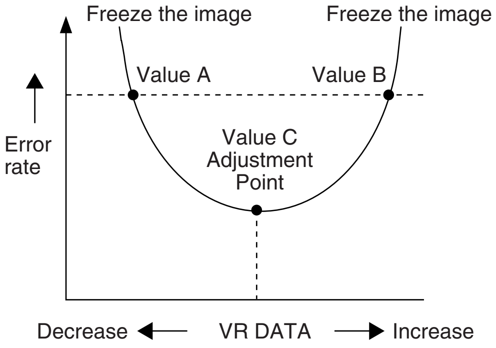


Fig. 3.5.2 (4) Consept of the adjustment

No.	Item	Measuring instruments & Input signals	Mode	Measuring point (◎) Adjustment parts (⬆) Adjustment level (☆)	Adjustment procedure
3	FS PLL 48 kHz adjustment	No input. Frequency counter	EE ADJUST MENU,110. FS PLL 48 kHz	◎ TP4 (FS PLL) GND: TP1 (GND) [Rewrite board] ⬆ JOG dial ☆ 12.288 MHz ± 0.1 MHz	(1) Press the USER 1/2 button to select ADJUST MENU No. 103, "FS PLL 48 kHz". (2) Adjust the frequency to the specified level. (3) Press the JOG dial to store the adjustment data.
4	FS PLL 44.1 kHzHz adjustment	No input Frequency counter	EE ADJUST MENU, 111. FS PLL 44.1 kHz	◎ TP4 (FS PLL) GND: TP1 (GND) [Rewrite board] ⬆ JOG dial ☆ 11.2896 MHz ± 0.1 MHz	(1) Press the USER 1/2 button to select ADJUST MENU No. 104, "FS PLL 44.1 kHz". (2) Adjust the frequency to the specified level. (3) Press the JOG dial to store the adjustment data.
5	27 MHz VCO center frequency adjustment	No input. Frequency counter	EE ADJUST MENU,113. 27 MHz VCO	◎ TP7 (MAIN VCO) GND: TP1 (GND) [Rewrite board] ⬆ JOG dial ☆ 13.5 MHz ± 0.1 MHz	(1) Press the USER 1/2 button to select ADJUST MENU No. 106, "27 MHz VCO". (2) Adjust the frequency to the specified level. (3) Press the JOG dial to store the adjustment data.

SECTION 5
EXPLODED VIEW AND PARTS LIST

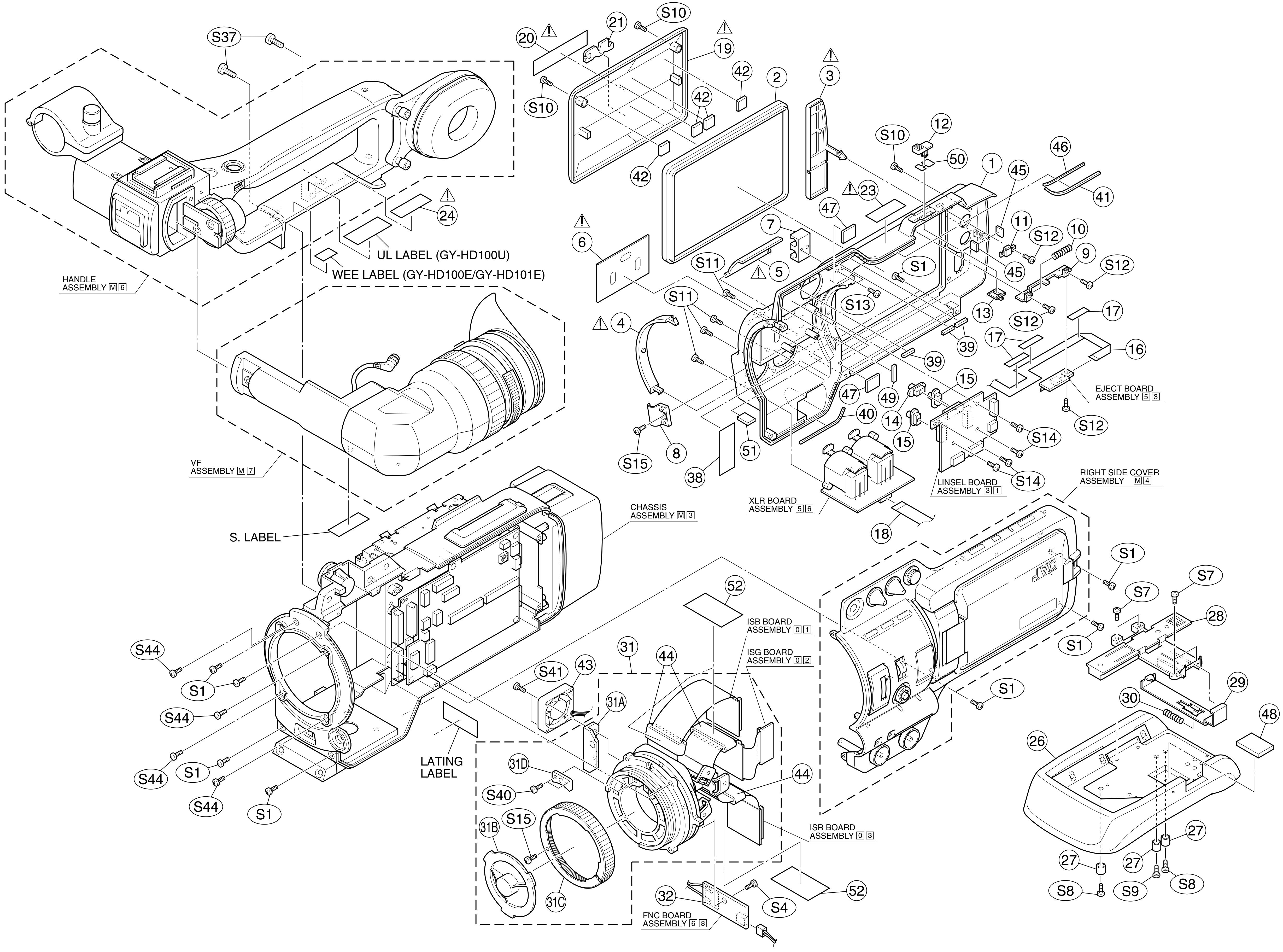
- **SAFETY PRECATION**
  Parts identified by the ⚠ symbol are critical for safety.
  Replace only with specified parts numbers.
- **NOTE**
  Parts not denoted by parts numbers are not supplied by JVC.

■ CABINET ASSEMBLY PARTS LIST M 2

M 2 M M ☐ ☐ ☐ ☐

Symbol No.	Part No.	Part Name	Description
1	LW10102-001C	LEFT SIDE COVER	
2	LW30611-001C-H	PACKING	
⚠ 3	LW30561-001C-H	COVER(JACK)	
⚠ 4	LW30562-001A-H	COLLAR	
⚠ 5	LW30556-001B-H	COVER(SD)	
⚠ 6	LW40823-001A-H	SHEET(AUDIO)	
7	SC42550H-011	CABLE HOLDER	
8	SC46668H-001	CABLE HOLDER	
9	LW30560-001B-H	EJECT BRACKET	
10	LW40822-001B-H	SPRING	
11	LW40821-001A-H	WINDOW(EJECT)	
12	LW30558-001A-H	EJECT KNOB	
13	LW30559-002A-H	EJECT HOLDER	
14	LW40163-001A-H	SLIDE KNOB1	
15	LW40164-001A-H	SLIDE KNOB2	x2
16	QUQ105-0622AA-E	FFC WIRE	
17	LW40916-001A-H	A.D.C.TAPE	x3
18	QUQ105-1304AA-E	FFC WIRE	
⚠ 19	LW20182-001A-H	OUTER COVER	
⚠ 20	LW40820-001A-H	PLATE	GY-HD100U/GY-HD100E
⚠ 20	LW40820-002A-H	PLATE	GY-HD101E
21	LW40840-001B	MARK(JVC)	
⚠ 23	SC46608-021	CAUTION LABEL	
⚠ 24	SC46171H-001	WARNING LABEL	GY-HD100E/GY-HD101E
26	LW10107-001B	SHOULDER PAD	
27	LW40450-001A-H	SPACER	x3
28	LW20180-001B-H	SLIDE BASE	
29	LW40864-001B-H	PUSH PLATE	
30	LW40865-001A-H	COMPRESS SPRING	
31	SCM1388-002A	OPTICAL ASSEMBLY	
31A	LS40581-001A-H	FAN BRACKET	
31B	LW40881-001A-H	LENS CAP	
31C	LW30605-001A	PING	
31D	SC45853-001	LENS PLATE	
32	LS40543-002A	FELT SPACER	
38	LS40598-001A	BANDAGE SHEET	x4
39	LS40602-001A	SHIELD CUSHION	x3
40	LS40583-001A	SHIELD	
41	LS40583-002A	SHIELD	
42	LS40631-001A	PAD	
43	QAR0376-001	FAN MOTOR	
44	QQR0988-002	FERITE CORE	x3
45	LW40595-001A	SPACER	x3
46	LS40583-004A	SHIELD	
47	LW40695-002A	SHIELD	x2
48	LS40665-001A	SHEET	
49	LS40583-003A	SHIELD	
50	LS40627-001A	SHEET (EJT KNOB)	
51	LS40592-001A	SPACER	
52	–	ZETSUEN TAPE	HZT18-UL10-3M
63	QQR0895-014	FERITE CORE	
S1	QYSPSPU2040MA	SCREW	M2x4.0
S4	QYSDSP2610MA	SCREW	M2.6x10
S7	QYSPSPT2080NA	SCREW	M2x8.0
S8	QYSDSF3008MA	SCREW	M3x10
S9	QYSDSP3012MA	SCREW	M3x12
S10	QYSPSPU2080MA	SCREW	M2x8.0
S11	QYSPSF3008NA	SCREW	M3x8
S12	QYSPSPU2040NA	SCREW	M2x4.0
S13	QYSPSFU2060NA	SCREW	M2x6.0
S14	SS411354-B2006N	SCREW	M2x6
S15	QYSPSPT2640MA	SCREW	M2.6x4.0
S37	QYSDSP4010NA	SCREW	M4x10
S40	QYSSSPT2040MA	SCREW	M2x40
S41	QYSDSP2614MA	SCREW	M2.6x14
S42	QYSPSPT1460MA	SCREW	M1.4x6.0
S44	QYSDSP3008MA	SCREW	M3x8

5.1 CABINET ASSEMBLY M2



S37
20
21
S10
19
S10
42
42
42
2
3
24
UL LABEL (GY-HD100U)
WEE LABEL (GY-HD100E/GY-HD101E)
HANDLE ASSEMBLY M6
S10
12
50
1
45
46
41
23
47
7
6
S11
5
S1
11
S12
10
9
S12
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S13
13
S12
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17
16
S11
4
39
39
EJECT BOARD ASSEMBLY 53
S12
15
47
49
40
14
15
S14
8
S15
51
38
S14
LINSEL BOARD ASSEMBLY 31
XLR BOARD ASSEMBLY 56
RIGHT SIDE COVER ASSEMBLY M4
18
VF ASSEMBLY M7
CHASSIS ASSEMBLY M3
S. LABEL
52
S1
S7
S7
28
ISB BOARD ASSEMBLY 01
ISG BOARD ASSEMBLY 02
S44
S1
S44
S44
S1
S44
S1
31
44
S41
43
31A
S1
29
30
48
26
LATING LABEL
31D
S40
S15
31B
31C
44
ISR BOARD ASSEMBLY 03
32
FNC BOARD ASSEMBLY 68
S4
52
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27
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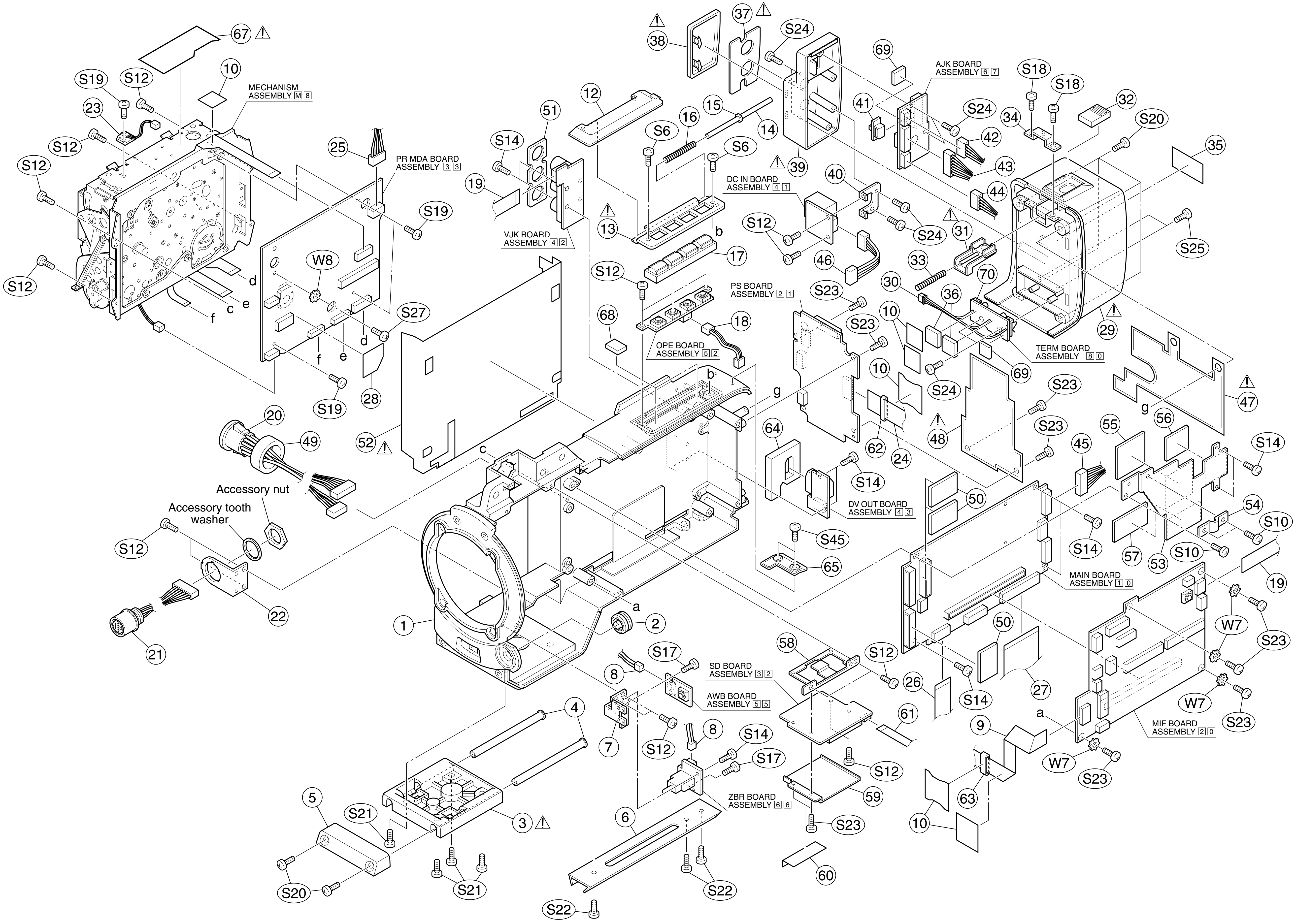
S8
S9
S8

5.2 CHASSIS ASSEMBLY M3


67 ⚠
10
MECHANISM ASSEMBLY M8
S19
S12
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S12
S12
S12
S12
c
e
d
f
25
PR MDA BOARD ASSEMBLY 33
S19
W8
S27
d
e
f
S19
28
52 ⚠
20
49
Accessory nut
Accessory tooth washer
S12
22
21
14
51
S14
19
VJK BOARD ASSEMBLY 42
12
S6
16
15
14
S6
13 ⚠
b
17
S12
18
68
OPE BOARD ASSEMBLY 52
b
g
c
1
a
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38 ⚠
37 ⚠
S24
39 ⚠
DC IN BOARD ASSEMBLY 41
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S12
S24
46
PS BOARD ASSEMBLY 21
S23
S23
10
62
24
64
S14
DV OUT BOARD ASSEMBLY 43
S45
65
69
AJK BOARD ASSEMBLY 67
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S24
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S18
S18
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S20
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31 ⚠
33
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S24
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TERM BOARD ASSEMBLY 80
29 ⚠
S25
47 ⚠
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48 ⚠
S23
S23
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S14
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S14
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S10
S10
MAIN BOARD ASSEMBLY 10
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S14
26
S12
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SD BOARD ASSEMBLY 32
AWB BOARD ASSEMBLY 55
S17
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7
S12
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S14
S17
ZBR BOARD ASSEMBLY 66
61
S12
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S23
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S22
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3 ⚠
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S21
S20
W7
S23
W7
S23
MIF BOARD ASSEMBLY 20
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9
W7
S23
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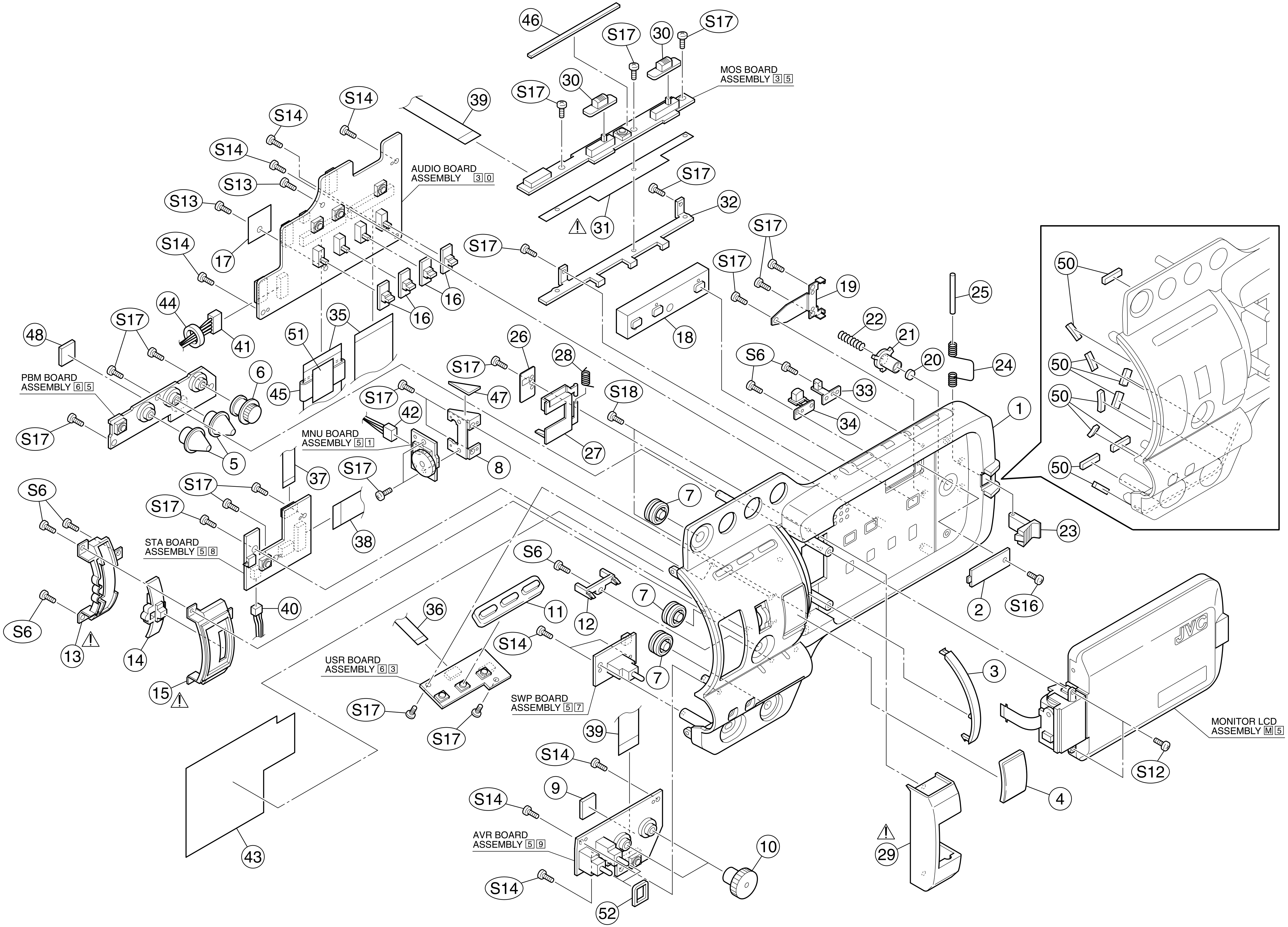
■ CHASSIS ASSEMBLY PARTS LIST M3

M4MM☐☐☐☐

Symbol No.	Part No.	Part Name	Description
1	LW10101-001C	CENTER FRAME	
2	SC44828-002	SWITCH CAP	
⚠ 3	LW20169-001B-H	BOTTOM COVER	
4	LW40814-001A-H	BALANCER SHAFT	x2
5	LW30547-001A-H	BALANCER	
6	LW40863-001B-H	GUIDE RAIL	
7	LW40886-001A-H	AWB BRACKET	
8	WJJ0604-001A-E	CONNECTING WIRE	FCN9 AWB/ABR-MIF
9	SCV2803-1515B	FFC WIRE	LCN13 MIF-LINSEL
10	–	ZETSUEN TAPE	HZT18-UL10-3M
12	LW30548-001C-H	OPERATION COVER	
⚠ 13	LW30549-001B-H	OPERATION BASE	
14	LW40816-001A-H	SHAFT	
15	QYREE1200X	E RING	
16	SC46532H-001	SPRING(1)	
17	LW30550-001A-H	OPERATION KNOB	
18	WJJ0602-001A-E	CONNECTING WIRE	
19	QUQ105-1010AA-E	FFC WIRE	CN34 VJK-MIF
20	QAM0754-001	CAMERA CABLE	CN23 MIF
21	WJJ0600-001A-E	LENS CONNECTOR	CN3 MAIN
22	LW40815-001B-H	LENS BRACKET	
23	QSD0006-001	DEW SENSOR	
24	QUQ105-2004AA-E	FFC WIRE	CN30 PS-MAIN
25	WJJ0603-001A-E	CONNECTING WIRE	CN75 PRMDA-PS
26	QUQ105-1607AA-E	FFC WIRE	CN17 PRMDA-MAIN
27	QUQ105-5007AA-E	FFC WIRE	CN16 PRMDA-MAIN
28	LW40900-001A-H	SHIELD	
⚠ 29	LW10109-001C-H	REAR COVER	
30	WJM0444-001A-E	CONNECTING WIRE	TERM-PS
⚠ 31	LW30553-001A-H	BATTERY ROCK	
32	LW30607-001A-H	EJECT KNOB	
33	LW40878-001A-H	SPRING	
34	LW40888-001B-H	SPR BRACKET	
35	–	CAUTION LABEL	SC45456, GY-HD100U
36	LS40543-002A	FELT SPACER	x2
⚠ 37	LW40877-001B-H	REAR PANEL	
⚠ 38	LW30608-001D-H	CONECTOR COVER	
⚠ 39	LW20181-001B-H	SWITCH COVER	
40	LW40889-001A-H	DC BRACKET	
41	LW40891-001A-H	KNOB	
42	WJJ0610-001A-E	CONNECTING WIRE	CN54 AJK-MF
43	WJJ0609-001B-E	E-SI C WIRE C-C	CN19 AJK-MIF
44	WJJ0169-001B-E	E-SH C WIRE C-C	CN11-AJK-DVOUT
45	WJJ0601-001A-E	CONNECTING WIRE	CN29 PS-MAIN
⚠ 47	LS30471-001A	SHIELD SHEET(R)	
⚠ 48	LS40584-001A	SHIELD SHEET	
49	QQR0976-001	FERRITE CORE	FOR C. CABLE
50	QQR1346-001	FERRITE PLATE	x3
51	LS30481-001A	SHEET (RCA)	
⚠ 52	LS20140-001A-H	INSULATOR 1	
53	LS30466-001A-H	CONDUCT.PLATE	
54	LS40564-001A-H	PIPE.HOLDER.2	
55	LS40586-001A	PAD SHEET	
56	LS40586-002A	PAD SHEET	
57	LS40586-003A	PAD SHEET	
58	LW40887-001A-H	SD BRACKET	
59	LS40601-001A	SHIELD SHEET SD	
60	LS40599-001A	BADAGE SHEET 2	
61	QUQ105-1007AA-E	FFC WIRE	
62	QQR0895-013	FERITE CORE	
64	LS40610-001A	SPACER(DV)	
65	LS30472-001A	REAR COVER T	
⚠ 67	LS40580-001B-H	INSULATOR 2	
68	LS40664-001A	CUSHON (OPE)	x2
69	LS40646-001A	REAR CUSHON	x2
70	LY21007-001E	REAR UNIT	
S6	QYSPSPT2040MA	SCREW	M2x4.0
S10	QYSPSPU2080MA	SCREW	M2x8.0
S12	QYSPSPU2040NA	SCREW	M2x40
S14	SS411354-B2006N	SCREW	
S17	QYSPSPU2030NA	SCREW	M2x30
S18	QYSPSFU2040MA	SCREW	M2x4
S19	YQ43893	SCREW	
S20	QYSPSP2606MA	SCREW	M2.6x6
S21	QYSDSP2605MA	SCREW	M2.6x5
S22	QYSSSP2606NA	SCREW	M2.6x6
S23	QYSPSPH2006NA	SCREW	M2x6
S24	QYSPSFU2060MA	SCREW	M2x6.0
S25	QYSPSFT1730MA	SCREW	M1.7x3.0
S27	LY30031-003A	SCREW	
S45	QYSDSP3004MA	SCREW	M3x4
W7	QYWBS285803NA	WASHER	x4
W8	QYWBS224803NA	WASHER	

5.3 RIGHT SIDE COVER ASSEMBLY M4


46
S17
30
S17
MOS BOARD ASSEMBLY 35
S17
30
39
S14
S14
S14
AUDIO BOARD ASSEMBLY 30
S13
S13
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S17
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S14
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S17
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51
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26
28
S6
20
24
PBM BOARD ASSEMBLY 65
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S17
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S18
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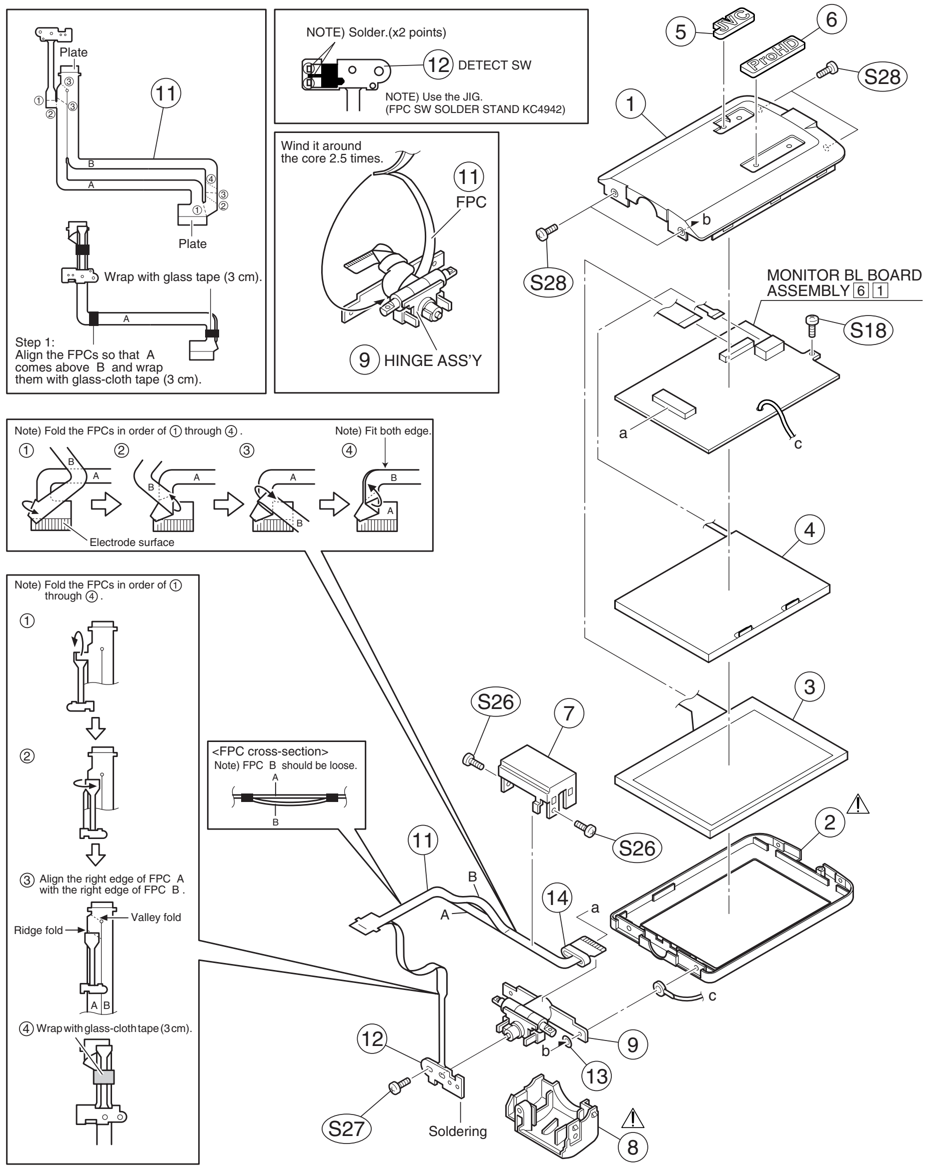
42
S17
34
1
50
50
MNU BOARD ASSEMBLY 51
5
8
27
50
S17
37
S17
S6
S17
7
23
S17
38
STA BOARD ASSEMBLY 58
S6
2
S16
S6
7
36
11
40
12
S14
13
14
7
3
USR BOARD ASSEMBLY 63
15
SWP BOARD ASSEMBLY 57
S17
S17
MONITOR LCD ASSEMBLY M5
JVC
39
S12
S14
9
4
S14
10
AVR BOARD ASSEMBLY 59
29
43
S14
52

■ RIGHT SIDE COVER ASSEMBLY PARTS LIST M 4

M 3 M M ☐☐☐☐

Symbol No.	Part No.	Part Name	Description
1	LW10103-001B	R. SIDE COVER	
2	LW40182-003A-H	COVER	
3	LW30562-001A-H	COLLAR	
4	LW30563-001A-H	LIGHT COVER	
5	LW40872-001B-H	VR KNOB	
6	LW40873-001B-H	VR KNOB	
7	SC45246H-001	KNOB	x3
8	LW40827-001A-H	SHUTTER BKT	
9	LS40543-002A	FELT SPACER	
10	LW40824-001A-H	VR.KNOB	x2
11	LW30570-001A-H	PUSH KNOB	
12	LW30573-001A-H	LED PLATE 2	
⚠ 13	LW20171-001A-H	SLIDE BASE	
14	LW30567-001C-H	ND KNOB	
⚠ 15	LW30568-001B-H	ND KNOB COVER	
16	SC46796H-001	SLIDE KNOB	x4
17	LS40571-001A	SHIELD SHEET	
18	LW30571-001A-H	PUSH KNOB	
19	LW30569-001A-H	LCD BRACKET	
20	LW40188-002A-H	CUSHION	
21	LW40184-001A-H	RELEASE KNOB	
22	LW40903-001A-H	COMPRESS SPRING	
23	LW40825-001B-H	LCD KNOB	
24	LW40826-001B-H	TOR.SPRING	
25	LW40884-001A-H	SHAFT	
26	LW40828-001A-H	BRACKET	
27	LW30572-001D-H	LCD BOARD COVER	
28	LW40829-001B-H	TOR.SPRING	
⚠ 29	LW30564-001A-H	HINGE COVER	
30	LW30566-001A-H	SLIDE KNOB	x2
⚠ 31	LW40885-001A-H	SHEET	
32	LW30603-001A-H	BORD BRACKET	
33	LW40831-001A-H	LED PLATE 1	
34	LW30565-001A-H	PUSH KNOB	
35	SCV2803-5010B	FFC WIRE	x2
36	QUQ105-10X5AA-E	FFC WIRE	CN55 USR-PBM
37	QUQ105-1103AA-E	FFC WIRE	CN50 USR-STA
38	QUQ105-2413AA-E	FFC WIRE	CN10 STA-MIF
39	QUQ105-18X7AA-E	FFC WIRE	x2
40	WJJ0608-001A-E	CONNECTING WIRE	CN52 STA-SWP
41	WJN0170-001A-E	CONNECTING WIRE	CN4 AUD-SWP
42	WJJ0607-001A-E	CONNECTING WIRE	CN51 MNU-STA
43	LS40600-001A	SHEET	
44	QQR1222-001	FERRITE CORE	FOR No.41
45	QQR0895-011	FERITE CORE	x2
46	LS40663-001A	PAD (MOS)	
47	LS40616-001A	ND SPACER	
48	LS40646-001A	REAR CUSHION	
49	LS40583-005A	SHIELD	
50	LS40602-001A	SHIELD CUSHION	x9
51	–	ZETSUEN TAPE	HZT18-UL10-3M
52	LW40383-001A-H	CUSHION	x2
S1	QYSPSPU2040MA	SCREW	M2x4.0
S6	QYSPSPT2040MA	SCREW	M2x4.0
S12	QYSPSPU2040NA	SCREW	M2x4.0
S13	QYSPSPU2030NA	SCREW	M2x3.0
S14	SS411354-B2006N	SCREW	M2x6
S16	QYSPSPT1730MA	SCREW	M1.7x3.0
S17	QYSPSPU2030NA	SCREW	M2x3.0
S18	QYSPSFU2040MA	SCREW	M2x4.0

5.4 MONITOR LCD ASSEMBLY M 5



Wrap with glass tape (3 cm).

Step 1:
Align the FPCs so that A comes above B and wrap them with glass-cloth tape (3 cm).

NOTE) Solder.(x2 points)

NOTE) Use the JIG.
(FPC SW SOLDER STAND KC4942)

Wind it around the core 2.5 times.

Note) Fold the FPCs in order of ① through ④.

Note) Fit both edge.

Note) Fold the FPCs in order of ① through ④.

③ Align the right edge of FPC A with the right edge of FPC B.

④ Wrap with glass-cloth tape (3cm).

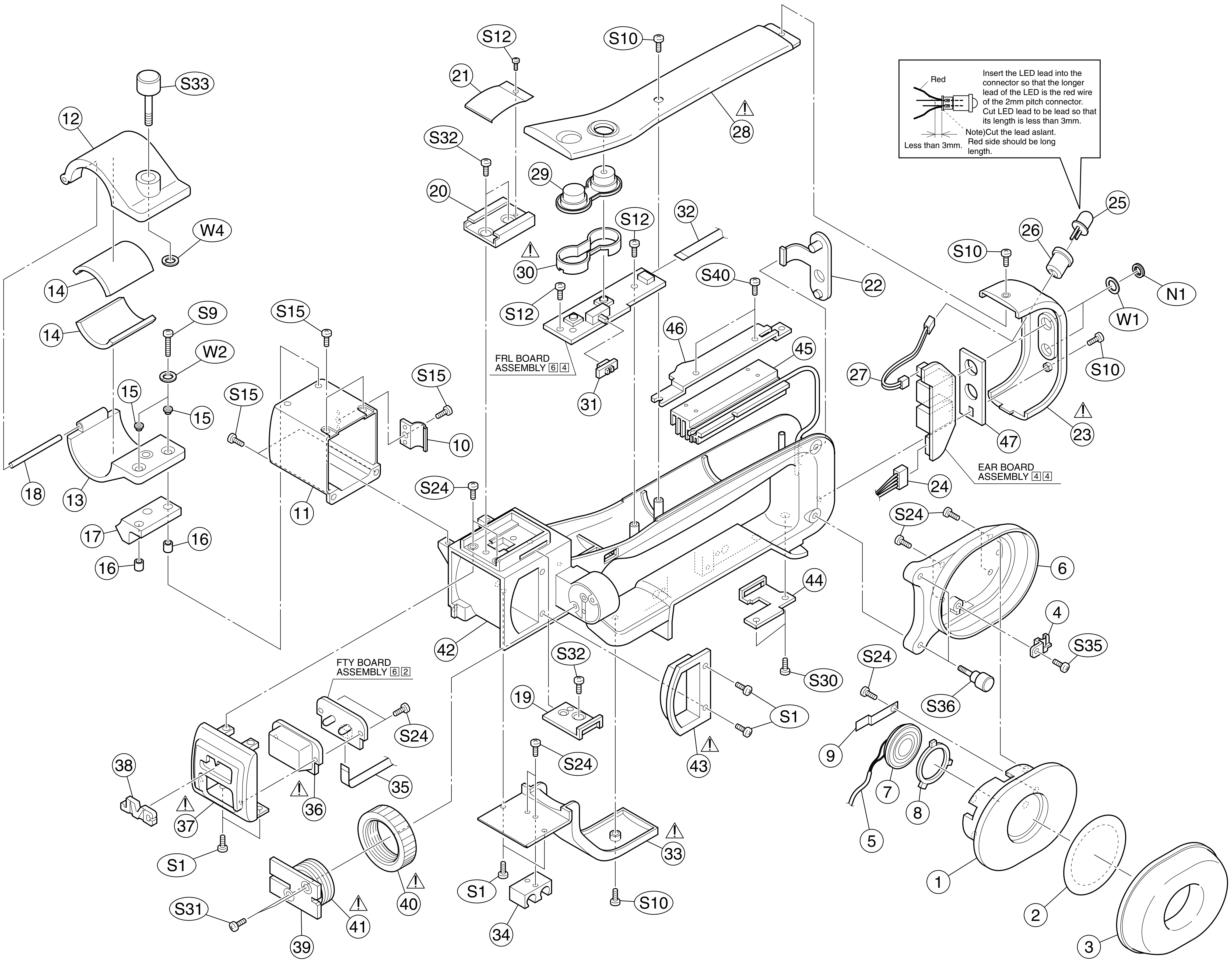
<FPC cross-section>
Note) FPC B should be loose.

■ MONITOR LCD ASSEMBLY PARTS LIST M 5

M 5 M M ☐☐☐☐

Symbol No.	Part No.	Part Name	Description
1	LW10104-001A	MONITOR COVER	
⚠ 2	LW10105-001A-H	MONITOR CASE	
3	QLD0378-001	LCD	
4	QLL0172-001	BACK LIGHT	
5	LW40840-001B	MARK(JVC)	
6	LW40832-001A	PLATE(HD)	
7	LW20172-001A-H	HINGE COVER 1	
⚠ 8	LW20074-001C-H	HINGE COVER 2	
9	LY32079-001A	HINGE ASSEMBLY	
11	QAL0222-001	FPC	
12	NSW0095-001	DETECT SWITCH	
13	LW40279-003A	RING SHEET	
14	QQR1685-001	FERITE CORE	
S18	QYSPSFU2040MA	SCREW	M2x4.0
S26	LY30031-0A8A	SCREW	
S27	LY30031-003A	SCREW	
S28	LY30031-052A	SCREW	

5.5 HANDLE ASSEMBLY M 6



Insert the LED lead into the connector so that the longer lead of the LED is the red wire of the 2mm pitch connector. Cut LED lead to be lead so that its length is less than 3mm.

Note)Cut the lead aslant. Red side should be long length.

Red
Less than 3mm.
S12
S10
S33
12
21
28
S32
29
20
25
26
W4
S12
32
30
S10
N1
14
S40
22
S9
S15
S12
W1
14
46
W2
FRL BOARD ASSEMBLY 6 4
45
S15
15
S15
27
S10
15
31
23
10
47
18
13
S24
EAR BOARD ASSEMBLY 4 4
24
11
S24
17
16
6
16
44
42
4
S35
S32
S24
FTY BOARD ASSEMBLY 6 2
S30
S36
19
S1
S24
9
38
S24
43
7
35
8
37
36
5
S1
33
1
40
S1
S10
S31
41
2
39
34
3

■ HANDLE ASSEMBLY PARTS LIST M 6

M 6 M M ☐ ☐ ☐ ☐

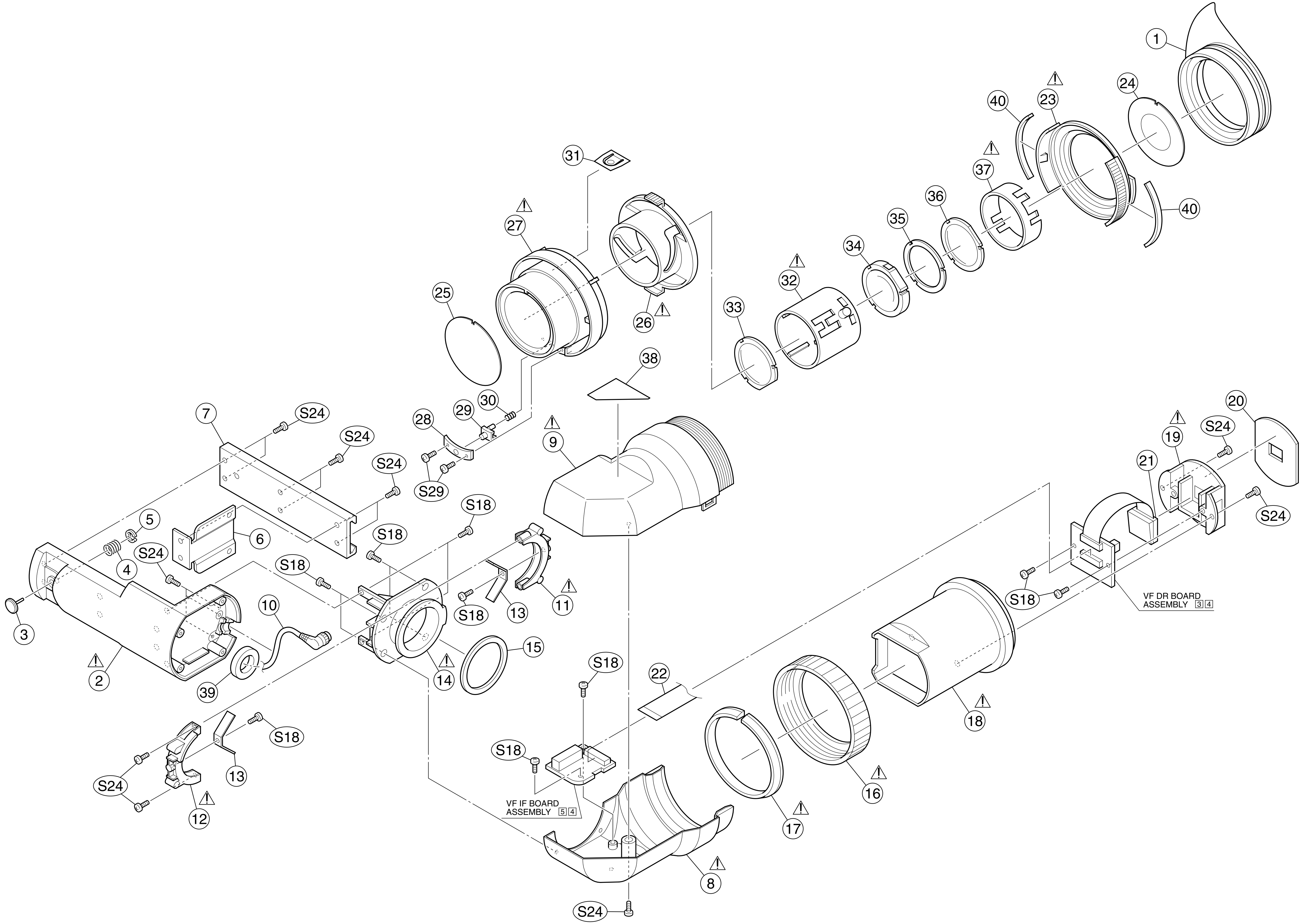
Symbol No.	Part No.	Part Name	Description
1	LW30595-001A-H	PAD HOLDER	
2	LW40901-001A-H	DP SHEET	
3	LW30596-001A-H	PAD	
4	LW40867-001A-H	WIRE GUIDE	
5	QAM0802-001	PLUG CORD	
6	LW20179-001A	CHEEK PAD	
7	QAS0063-003	SPEAKER	
8	LW40410-001A-H	SHEET	
9	LW40216-001B-H	SP BRACKET	
10	SC46668H-001	CABLE HOLDER	
11	LW20177-001A	HANDLE COVER	FOR MIC HOLDER
12	LW30578-001A-H	HOLDER COVER	FOR MIC HOLDER
13	LW30577-001B-H	HOLDER BASE	FOR MIC HOLDER
14	LW40843-001A-H	CUSHION	x2
15	LW40924-001A-H	MH CUSHION	x2
16	LW40890-002A	SPACER	x2
17	LW40842-001A-H	CUSHION	
18	QYPRE2014	SPRING PIN	
19	LW40838-001C-H	BRACKET (F)	
20	LW40833-001A-H	SHOE	
21	LW40834-001B-H	SHOE SPRING	
22	LW30575-001B-H	E.H. COVER	
⚠ 23	LW20175-001A-H	HANDLE COVER(R)	
24	WJN0168-001B-E	WIRE	CN12 EAR-MIC
25	SLR-56VR3F	L.E.D.	
26	SM3512	L.E.D. MOUNTOR	
27	WJJ0605-001A-E	CONNECTING WIRE	CN47 EAR-LED
⚠ 28	LW20173-001C-H	HANDLE COVER(T)	
29	LW40837-001B-H	HANDLE BUTTON	
⚠ 30	LW40836-001B-H	BUTTON GUIDE	
31	LW40835-001A-H	SLIDE KNOB	
32	QUQ105-1022AA-E	FFC WIRE	CN48FRL-CN8MIF
⚠ 33	LW20176-001A-H	HANDLE COVER(B)	
34	SC42550H-011	C.HOLDER	
35	QUQ105-1022AA-E	FFC WIRE	CN8 FTY-FRL
⚠ 36	LW30574-001A-H	TALLY CAP (F)	
⚠ 37	LW20174-001A-H	HANDLE COVER(F)	
38	LW40840-001B	MARK(JVC)	
39	LW30590-001A-H	SLIDE BASE	
⚠ 40	LW40852-001A-H	SLIDE LOCK RING	
⚠ 41	LW40893-001A-H	SLIDE SCREW	
42	LW10106-001C	HANDLE	
⚠ 43	LW30576-001A-H	V.F. GUIDE	
44	LW40839-001C-H	BRACKET (R)	
45	LS30467-001B-H	HEAT SINK ASSEMBLY	
46	LS30465-001B-H	SINK HOLDER.1	
47	LS40566-001A	CU SHEET	
S1	QYSPSPU2040MA	SCREW	M2x4.0 x6
S9	QYSDSP3012MA	SCREW	M3x12 x2
S10	QYSPSPU2080MA	SCREW	M2x8.0 x4
S12	QYSPSPU2040NA	SCREW	M2x40 x3
S15	QYSPSPT2640MA	SCREW	M2.6x4.0 x5
S24	QYSPSFU2060MA	SCREW	M2x6.0 x11
S30	QYSDSP3004NA	SCREW	M3x4.0 x2
S31	QYSSSP3018MA	SCREW	M3x18 x2
S32	QYSSSP3005MA	SCREW	M3x5 x3
S33	LW40841-001B-H	SCREW	FOR MIC HOLDER
S35	QYSPSPT2040NA	SCREW	M2x4.0
S36	LW40866-001A-H	SCREW	x2
S40	QYSSSPT2040MA	SCREW	M2x4.0 x2
W1	LW40896-001A	E.H. WASHER	x2
W2	QYWSS327005NA	WASHER	x2
W4	LW40683-001A-H	C WASHER	
N1	LW40895-001A	E.H. NUT	x2

■ VF ASSEMBLY PARTS LIST M 7

M 7 M M ☐☐☐☐

Symbol No.	Part No.	Part Name	Description
1	LW30579-001C-H	EYE CAP	
⚠ 2	LW20178-001B-H	SHOE COVER	
3	LW40853-001A-H	LOCK PIN	
4	LW40858-001A-H	COIL SPRING	
5	QYREE1500X	E RING	
6	LW40860-001A-H	NUT PLATE	
7	LW30589-001A-H	SLIDE SHOE	
⚠ 8	LW30588-001B-H	VF COVER B	
⚠ 9	LW30587-001B-H	VF COVER T	
10	QAM0753-001	CAMERA CABLE	CN65 VF IF
⚠ 11	LW30592-001B-H	CLUTCH A	
⚠ 12	LW30593-001A-H	CLUTCH B	
13	LW40862-001A-H	CLITCH SPRING	x2
⚠ 14	LW30591-001A-H	CLUTCH BASE	
15	LW40861-001B-H	CLUTCH RING	
⚠ 16	LW40850-001A-H	LOCK RING	
⚠ 17	LW40851-001A-H	SPACER	
⚠ 18	LW30585-001C-H	SLIDE COVER	
⚠ 19	LW30586-001B-H	LCD HOLDER	
20	LW40894-001A-H	LCD PLATE	
21	QLD0368-001	LCD	
22	QUQ105-2017AA-E	FFC WIRE	
⚠ 23	LW30580-001B-H	FRONT COVER	
24	LW40854-001B-H	COVER SHEET	
25	LW40849-001B	FILTER(PL)	
⚠ 26	LW30584-001A-H	CAM RING	
⚠ 27	LW30583-001C-H	VF HOLDER	
28	LW40855-001A-H	PLATE	
29	LW40856-001A-H	KNOB	
30	LW40859-001B-H	COIL SPRING	
31	LW40857-001A-H	SPRING PLATE	
⚠ 32	LW30581-001C-H	LENS HOLDER	
33	LW40848-001B	VF LENS 3	
34	LW40847-001B	VF LENS 2	
35	LW40931-001A-H	LENS SPACER	
36	LW40846-001B	VF LENS 1	
⚠ 37	LW30582-001B-H	LENS HOLDERCAP	
38	SC46425-001	LABEL	
39	QQR1222-001	FERRITE CORE	FOR No.10
40	LS40665-002A	SHEET (SP)	x2
S18	QYSPSFU2040MA	SCREW	M2x4.0
S24	QYSPSFU2060MA	SCREW	M2x6.0
S29	QYSPSFT2040MA	SCREW	M2x4.0

5.6 VF ASSEMBLY M 7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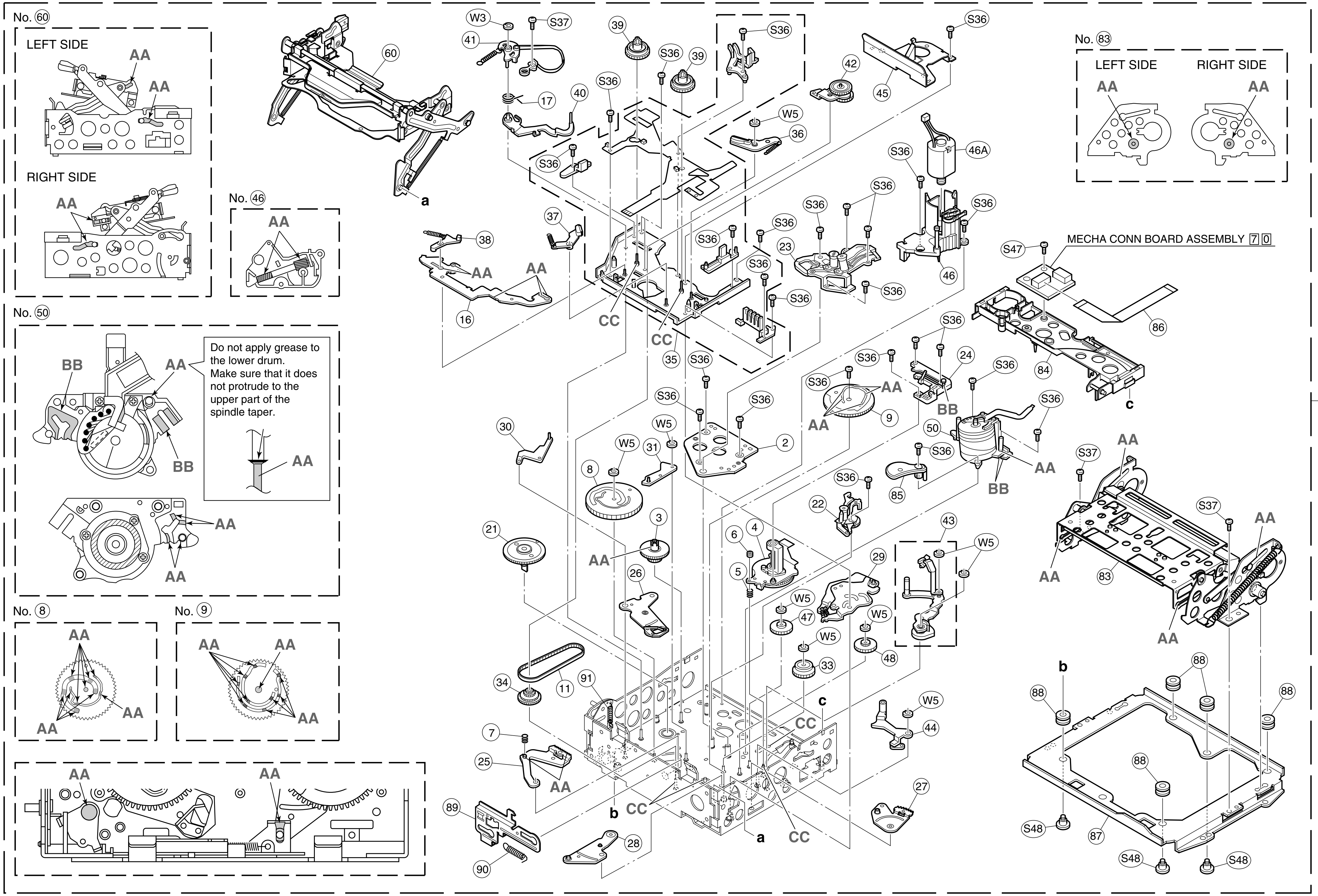
VF IF BOARD ASSEMBLY 5 4
VF DR BOARD ASSEMBLY 3 4

5.7 MECHANISM ASSEMBLY M8


Do not apply grease to the lower drum. Make sure that it does not protrude to the upper part of the spindle taper.

No. 60
LEFT SIDE
AA
AA
RIGHT SIDE
AA
AA
No. 46
AA
No. 50
BB
AA
BB
AA
AA
AA
No. 8
AA
AA
AA
No. 9
AA
AA
AA
AA
AA
60
a
W3
S37
41
17
40
39
S36
39
S36
36
W5
42
45
S36
46A
46
23
38
37
16
AA
AA
CC
CC
35
No. 83
LEFT SIDE
RIGHT SIDE
AA
AA
MECHA CONN BOARD ASSEMBLY 70
S47
86
84
c
1
24
9
AA
AA
BB
50
AA
BB
AA
S37
83
AA
AA
AA
2
30
31
W5
8
3
21
AA
26
6
4
5
22
85
43
29
47
48
33
34
11
91
7
25
AA
89
90
28
b
CC
a
CC
CC
c
44
27
b
88
88
88
88
87
S48
S48
S48

Classifi-cation	Part No.	Symbol in drawing
Grease	KYODO-SH-P	AA
Grease	RX-410R	BB
Oil	YTU94027	CC

NOTES:
- This section indicates that the grease and oil are to be applied on locations marked with AA, BB and CC.
  During checking and servicing, check if grease has been applied on the locations marked with AA, BB and oil on the locations marked with CC.
- Apply also grease and oil on some locations in the main cam gear and the cam groove at the rear side of the sub cam gear.

■ MECHANISM ASSEMBLY PARTS LIST M 8

M 8 M M ☐☐☐☐

Symbol No.	Part No.	Part Name	Description
1	LL30438-001A	MECHA UNIT	
2	LL20124-001A	DRUM BASE DECK	
3	LL40465-001A	WHEEL GEAR2	
4	QAR0012-002	CAPSTAN MOTOR	
5	LY30002-003A	COMPRESS SPRING	
6	LY41390-001B	ADJUST NUT	
7	LY40224-001A	COLLAR	
8	LL10093-001A	MAIN CAM	
9	LL20126-001A	SUB CAM	
11	PRD45310	TIMING BELT	
16	LL20127-001A	CONTROL PLATE	
17	LY41243-001A	TORSION SPRING	
21	LL30400-001A	ENCODER GEAR	
22	PRD31521B-04	GUIDE RAIL(S) ASSEMBLY	
23	LY20097-004A	G.RAIL(T) ASSEMBLY	
24	LY30345-001A	M.CATCHER ASSEMBLY	
25	LY40223-001A	ARM GEAR 1 ASSEMBLY	
26	LL40464-001A	CENTERING ARM ASSEMBLY	
27	LL40466-001A	ARM GEAR 2 ASSEMBLY	
28	LL40468-001A	C.P.D.ARM ASSEMBLY	
29	LY30347-001A	CHARGE ARM ASSEMBLY	
30	LY40236-001A	T.CTL ARM ASSEMBLY	
31	LL40473-001A	B.CTL.ARM ASSEMBLY	
33	PRD31445A	PULLEY GEAR ASSEMBLY	
34	LY40239-003A	CENT. GEAR ASSEMBLY	
35	PRD31443C	SUB DECK ASSEMBLY	
36	LL40479-001B	SUB BRAKE ASSEMBLY	
37	LL40482-001A	M.BRAKE(T) ASSEMBLY	
38	LL40484-001A	M.BRAKE(S) ASSEMBLY	
39	LY40255-003A	REEL DISK ASSEMBLY	x2
40	LY41245-001B	TENSION ARM SUB ASSEMBLY	
41	LY41246-003B	B.ARM PLATE SUB ASSEMBLY	
42	LY30370-002D	SWING ARM ASSEMBLY	
43	LY30380-003A	EXIT G.ARM ASSEMBLY	
44	LY30374-001B	P.R.ARM ASSEMBLY	
45	LL40486-001A	REEL COVER ASSEMBLY	
46	LL30409-001A	GEAR COVER ASSEMBLY	
46A	LL40489-001A	MOTOR ASSEMBLY	INC. No.46
47	PRD45311	R.DRIVE GEAR 1	
48	PRD45312	R.DRIVE GEAR 2	
50	YDV2100B	DRUM FINAL ASSEMBLY	
60	LL20129-001A	C.HOUSING ASSEMBLY	
83	LL20134-001A	OUTER UNIT ASSEMBLY	
84	LL20128-001A	TAPE GUARD	
85	LL30410-001A	TU TAPE GUARD	
86	QUQ105-13X7AA-E	FFC WIRE	
87	LL20125-001A	MECHA BRACKET	
88	LY42796-001A	BUSH	x5
89	LL30398-001A	MAIN LOCK PLATE	
90	LL40463-001A	TENSION SPRING	FOR No.89
91	LL40516-001A	TENSION SPRING	
S36	YQ43893	SCREW	M1.4x2
S37	LL40426-001A	SCREW	M1.4x2
S43	QYSDSP2003ZA	SCREW	M2x3
S46	QYSPSPU1430MA	SCREW	M1.4x30
S47	QYSDSG2004NA	SCREW	M2x4
S48	LY30032-002A	SCREW	
W3	PRD45316	SLIT WASHER	
W5	YQ44246	SLIT WASHER	

SECTION 6
ELECTRICAL PARTS LIST

SAFETY PRECAUTION:
Parts identified by the ⚠ symbol are critical for safety. Replace only with specified parts numbers.
For maximum reliability and performance, all other replacement parts should be identical to those specified.

NOTE:

- Parts not denoted by parts numbers are not supplied by JVC.
- Abbreviations in this list are as follows:

RESISTORS
In the "Description" column:
All resistance values are in ohms (Ω).
k expresses kilo-ohm (1 000 ohms, kΩ).
M expresses mega-ohm (10^6 ohms, MΩ).

In the "Parts Name" column:
CAR.RESISTOR : Carbon Resistor
C.M.F.RESISTOR : Constant Metalized Film Resistor
COMP.RESISTOR : Composition Resistor
FUSI.RESISTOR : Fusible Resistor
M.F.RESISTOR : Metal Film Resistor
M.G.RESISTOR : Metal Graze Resistor
M.P.RESISTOR : Metal Plate Resistor
O.M.F.RESISTOR : Oxide Metalized Film Resistor
TRIM.RESISTOR : Trimerer Resistor
U.F.RESISTOR : Non-inflammable Resistor
VAL.RESISTOR : Valiable Resistor
W.W.RESISTOR : Wire Wound Resistor

CAPACITORS
In the "Description" column:
All capacitance values are in microfarad (μ F) unless otherwise indicated.
p expresses picofarad (10^{-12} farad,pF).

In the "Parts Name" column:
CER.CAPACITOR : Ceramic Capacitor
E.CAPACITOR : Electrolytic Capacitor
FILM CAPACITOR : Film Capacitor
M.F.CAPACITOR : Metalized Film Capacitor
MICA CAPACITOR : Mica Capacitor
MPP CAPACITOR : Metalized PolyPropylene Capacitor
MPPS CAPACITOR : Metalized PolyPhenylene Sulfied film Capacitor
M.M.CAPACITOR : Metalized Mylar Capacitor
MYLAR CAPACITOR : Mylar Capacitor
N.P.CAPACITOR : Non-Poler electrolytic Capacitor
P.P.CAPACITOR : PolyPropylene Capacitor
PPS CAPACITOR : PolyPhenylene Sulfied film Capacitor
P.S.CAPACITOR : PolyStyrene Capacitor
TAN.CAPACITOR : Tantal Capacitor
TRIM.CAPACITOR : Trimer Capacitor
VAL.CAPACITOR : Valiable Capacitor

Note: In the "Description" column of the parts list, (U) means the parts for the GY-HD100U while (E) is for the GY-HD100E.

Symbol No.	Part No.	Part Name	Description	
IC1	SCV1585-064	I.C.(M)	JVC (U)	← **for GY-HD100U**
	SCV1585-067	I.C.(M)	JVC (E)	← **for GY-HD100E**

6.1 ISB BOARD ASSEMBLY PARTS LIST 0 1

CK279300A1 0 1 ☐☐☐☐☐☐

Symbol No.	Part No.	Part Name	Description
IC2	AD9949AKCPZ-W	I.C.(M)	ANALOG DEVICES
IC3	AD9949AKCPZ-W	I.C.(M)	ANALOG DEVICES
IC4	MM3142JN-X	I.C.(M)	MITSUMI
IC5	SN74LVC3G34U-X	I.C.(M)	TEXAS
IC6	SN74LVC3G34U-X	I.C.(M)	TEXAS
IC7	TC7SZ08FU-X	I.C.(M)	TOSHIBA
IC8	TC7SZ08FU-X	I.C.(M)	TOSHIBA
IC10	MM1573DN-X	I.C.(M)	MITSUMI
Q1	2SC5095/O/-X	TRANSISTOR	TOSHIBA
Q2	2SC4250-X	TRANSISTOR	TOSHIBA
Q3	2SC5095/O/-X	TRANSISTOR	TOSHIBA
Q4	2SC4250-X	TRANSISTOR	TOSHIBA
R2	NRSA6AD-103W	M.G.RESISTOR	10k 1/16W
R3	NRSA6AD-103W	M.G.RESISTOR	10k 1/16W
R4	NRSA6AD-332W	M.G.RESISTOR	3.3k 1/16W
R5	NRSA6AD-472W	M.G.RESISTOR	4.7k 1/16W
R7	NRSA6AD-103W	M.G.RESISTOR	10k 1/16W
R8	NRSA6AD-103W	M.G.RESISTOR	10k 1/16W
R9	NRSA6AD-332W	M.G.RESISTOR	3.3k 1/16W
R10	NRSA6AD-472W	M.G.RESISTOR	4.7k 1/16W
R11	NRSA6AJ-0R0W	M.G.RESISTOR	0 1/16W
R12	NRSA6AJ-0R0W	M.G.RESISTOR	0 1/16W
R21	NRSA6AJ-0R0W	M.G.RESISTOR	0 1/16W
R23	NRSA6AD-220W	M.G.RESISTOR	22 1/16W
R24	NRSA6AD-220W	M.G.RESISTOR	22 1/16W
R25	NRSA6AD-220W	M.G.RESISTOR	22 1/16W
R26	NRSA6AD-220W	M.G.RESISTOR	22 1/16W
R27	NRSA6AJ-0R0W	M.G.RESISTOR	0 1/16W
R29	NRSA6AJ-0R0W	M.G.RESISTOR	0 1/16W
R30	NRSA6AJ-0R0W	M.G.RESISTOR	0 1/16W
R31	NRSA6AD-220W	M.G.RESISTOR	22 1/16W
R32	NRSA6AD-220W	M.G.RESISTOR	22 1/16W
R33	NRSA6AJ-0R0W	M.G.RESISTOR	0 1/16W
R34	NRSA6AJ-0R0W	M.G.RESISTOR	0 1/16W
R35	NRSA6AJ-0R0W	M.G.RESISTOR	0 1/16W
R36	NRSA6AJ-0R0W	M.G.RESISTOR	0 1/16W
R37	NRSA6AD-102W	M.G.RESISTOR	1k 1/16W
R38	NRSA6AD-102W	M.G.RESISTOR	1k 1/16W
R39	NRSA6AD-102W	M.G.RESISTOR	1k 1/16W
R40	NRSA6AD-102W	M.G.RESISTOR	1k 1/16W
R41	NRSA6AD-102W	M.G.RESISTOR	1k 1/16W
R42	NRSA6AD-102W	M.G.RESISTOR	1k 1/16W
R43	NRSA6AJ-0R0W	M.G.RESISTOR	0 1/16W
R44	NRSA6AJ-0R0W	M.G.RESISTOR	0 1/16W
R45	NRSA6AD-103W	M.G.RESISTOR	10k 1/16W
R51	NQR0559-009X	C.FERRITE BEADS	5W
R52	NQR0559-009X	C.FERRITE BEADS	5W
R55	NQR0559-009X	C.FERRITE BEADS	5W
R56	NQR0559-009X	C.FERRITE BEADS	5W
R57	NQR0559-009X	C.FERRITE BEADS	5W
R58	NQR0559-009X	C.FERRITE BEADS	5W
R59	NQR0559-009X	C.FERRITE BEADS	5W
R65	NRSA6AJ-0R0W	M.G.RESISTOR	0 1/16W
C1	NCJ11EK-106X-R	CER.CAPACITOR	10 25V
C2	NCJ11EK-106X-R	CER.CAPACITOR	10 25V
C3	NBS41AM-476X	TAN.CAPACITOR	47 10V
C4	NCB11AK-106X	CER.CAPACITOR	10 10V
C5	NCB31EK-473X	CER.CAPACITOR	0.047 25V
C6	NCB31EK-104X	CER.CAPACITOR	0.1 25V
C7	NCB31EK-473X	CER.CAPACITOR	0.047 25V
C8	NCB31HK-222X	CER.CAPACITOR	2200p 50V
C10	NCB31EK-473X	CER.CAPACITOR	0.047 25V
C12	NCB31EK-473X	CER.CAPACITOR	0.047 25V
C13	NBS40JM-686X	TAN.CAPACITOR	68 6.3V
C14	NCBA1AK-104W	CER.CAPACITOR	0.1 10V
C15	NCBA1AK-104W	CER.CAPACITOR	0.1 10V
C16	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C17	NCBA1AK-104W	CER.CAPACITOR	0.1 10V
C18	NCBA1AK-104W	CER.CAPACITOR	0.1 10V
C19	NCBA1AK-104W	CER.CAPACITOR	0.1 10V
C20	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C21	NCB30JK-105X	CER.CAPACITOR	1 6.3V
C22	NCB30JK-105X	CER.CAPACITOR	1 6.3V
C23	NCBA1AK-104W	CER.CAPACITOR	0.1 10V
C24	NBS40JM-686X	TAN.CAPACITOR	68 6.3V
C25	NCBA1AK-104W	CER.CAPACITOR	0.1 10V
C26	NCBA1AK-104W	CER.CAPACITOR	0.1 10V
C27	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C28	NCBA1AK-104W	CER.CAPACITOR	0.1 10V
C29	NCBA1AK-104W	CER.CAPACITOR	0.1 10V
C30	NCBA1AK-104W	CER.CAPACITOR	0.1 10V
C31	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C32	NCB30JK-105X	CER.CAPACITOR	1 6.3V
C33	NCB30JK-105X	CER.CAPACITOR	1 6.3V
C34	NCBA1AK-104W	CER.CAPACITOR	0.1 10V
C37	NCB11AK-106X	CER.CAPACITOR	10 10V
C38	NCB11AK-106X	CER.CAPACITOR	10 10V
C39	NCB11AK-106X	CER.CAPACITOR	10 10V
C40	NCBA1AK-104W	CER.CAPACITOR	0.1 10V
C41	NCBA1AK-104W	CER.CAPACITOR	0.1 10V
C42	NBS40JM-686X	TAN.CAPACITOR	68 6.3V
C43	NCBA1AK-104W	CER.CAPACITOR	0.1 10V
C44	NCBA1AK-104W	CER.CAPACITOR	0.1 10V
C46	NCB30JK-105X	CER.CAPACITOR	1 6.3V
C47	NCB11AK-106X	CER.CAPACITOR	10 10V
C48	NCBA1AK-104W	CER.CAPACITOR	0.1 10V
C50	NCB11AK-106X	CER.CAPACITOR	10 10V
C51	NCB11AK-106X	CER.CAPACITOR	10 10V
C52	NBZ0032-476X	TAN.CAPACITOR	47
LC1	NQR0598-001X	LC FILTER	
LC2	NQR0598-001X	LC FILTER	
LC3	NQR0598-001X	LC FILTER	
LC4	NQR0598-001X	LC FILTER	
LC5	NQR0598-001X	LC FILTER	
LC6	NQR0598-001X	LC FILTER	
J1	QUBD70-X1A1A1-E	SIN TWIST WIRE	
CN26	QGB0801L1-54X	CONNECTOR	54PIN

6.2 ISG BOARD ASSEMBLY PARTS LIST 0 2

CK279300A2 0 2 ☐☐☐☐☐☐

Symbol No.	Part No.	Part Name	Description
IC2	AD9949AKCPZ-W	I.C.(M)	ANALOG DEVICES
IC3	AD9949AKCPZ-W	I.C.(M)	ANALOG DEVICES
IC4	MM3142JN-X	I.C.(M)	MITSUMI
IC5	SN74LVC3G34U-X	I.C.(M)	TEXAS
IC6	SN74LVC3G34U-X	I.C.(M)	TEXAS
IC7	TC7SZ08FU-X	I.C.(M)	TOSHIBA
IC8	TC7SZ08FU-X	I.C.(M)	TOSHIBA
IC10	MM1573DN-X	I.C.(M)	MITSUMI
Q1	2SC5095/O/-X	TRANSISTOR	TOSHIBA
Q2	2SC4250-X	TRANSISTOR	TOSHIBA
Q3	2SC5095/O/-X	TRANSISTOR	TOSHIBA
Q4	2SC4250-X	TRANSISTOR	TOSHIBA
R2	NRSA6AD-103W	M.G.RESISTOR	10k 1/16W
R3	NRSA6AD-103W	M.G.RESISTOR	10k 1/16W
R4	NRSA6AD-332W	M.G.RESISTOR	3.3k 1/16W
R5	NRSA6AD-472W	M.G.RESISTOR	4.7k 1/16W
R7	NRSA6AD-103W	M.G.RESISTOR	10k 1/16W
R8	NRSA6AD-103W	M.G.RESISTOR	10k 1/16W
R9	NRSA6AD-332W	M.G.RESISTOR	3.3k 1/16W
R10	NRSA6AD-472W	M.G.RESISTOR	4.7k 1/16W
R11	NRSA6AJ-0R0W	M.G.RESISTOR	0 1/16W
R12	NRSA6AJ-0R0W	M.G.RESISTOR	0 1/16W
R21	NRSA6AJ-0R0W	M.G.RESISTOR	0 1/16W
R23	NRSA6AD-220W	M.G.RESISTOR	22 1/16W
R24	NRSA6AD-220W	M.G.RESISTOR	22 1/16W
R25	NRSA6AD-220W	M.G.RESISTOR	22 1/16W
R26	NRSA6AD-220W	M.G.RESISTOR	22 1/16W
R27	NRSA6AJ-0R0W	M.G.RESISTOR	0 1/16W
R29	NRSA6AJ-0R0W	M.G.RESISTOR	0 1/16W
R30	NRSA6AJ-0R0W	M.G.RESISTOR	0 1/16W
R31	NRSA6AD-220W	M.G.RESISTOR	22 1/16W
R32	NRSA6AD-220W	M.G.RESISTOR	22 1/16W
R33	NRSA6AJ-0R0W	M.G.RESISTOR	0 1/16W
R34	NRSA6AJ-0R0W	M.G.RESISTOR	0 1/16W
R35	NRSA6AJ-0R0W	M.G.RESISTOR	0 1/16W
R36	NRSA6AJ-0R0W	M.G.RESISTOR	0 1/16W
R37	NRSA6AD-102W	M.G.RESISTOR	1k 1/16W
R38	NRSA6AD-102W	M.G.RESISTOR	1k 1/16W
R39	NRSA6AD-102W	M.G.RESISTOR	1k 1/16W
R40	NRSA6AD-102W	M.G.RESISTOR	1k 1/16W
R41	NRSA6AD-102W	M.G.RESISTOR	1k 1/16W
R42	NRSA6AD-102W	M.G.RESISTOR	1k 1/16W
R43	NRSA6AJ-0R0W	M.G.RESISTOR	0 1/16W
R44	NRSA6AJ-0R0W	M.G.RESISTOR	0 1/16W
R45	NRSA6AD-103W	M.G.RESISTOR	10k 1/16W
R51	NQR0559-009X	C.FERRITE BEADS	5W
R52	NQR0559-009X	C.FERRITE BEADS	5W
R55	NQR0559-009X	C.FERRITE BEADS	5W
R56	NQR0559-009X	C.FERRITE BEADS	5W
R57	NQR0559-009X	C.FERRITE BEADS	5W
R58	NQR0559-009X	C.FERRITE BEADS	5W
R59	NQR0559-009X	C.FERRITE BEADS	5W
R65	NRSA6AJ-0R0W	M.G.RESISTOR	0 1/16W
C1	NCJ11EK-106X-R	CER.CAPACITOR	10 25V
C2	NCJ11EK-106X-R	CER.CAPACITOR	10 25V
C3	NBS41AM-476X	TAN.CAPACITOR	47 10V
C4	NCB11AK-106X	CER.CAPACITOR	10 10V
C5	NCB31EK-473X	CER.CAPACITOR	0.047 25V
C6	NCB31EK-104X	CER.CAPACITOR	0.1 25V
C7	NCB31EK-473X	CER.CAPACITOR	0.047 25V
C8	NCB31HK-222X	CER.CAPACITOR	2200p 50V
C10	NCB31EK-473X	CER.CAPACITOR	0.047 25V
C12	NCB31EK-473X	CER.CAPACITOR	0.047 25V
C13	NBS40JM-686X	TAN.CAPACITOR	68 6.3V
C14	NCBA1AK-104W	CER.CAPACITOR	0.1 10V
C15	NCBA1AK-104W	CER.CAPACITOR	0.1 10V
C16	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C17	NCBA1AK-104W	CER.CAPACITOR	0.1 10V
C18	NCBA1AK-104W	CER.CAPACITOR	0.1 10V

Symbol No.	Part No.	Part Name	Description
C19	NCBA1AK-104W	CER.CAPACITOR	0.1 10V
C20	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C21	NCB30JK-105X	CER.CAPACITOR	1 6.3V
C22	NCB30JK-105X	CER.CAPACITOR	1 6.3V
C23	NCBA1AK-104W	CER.CAPACITOR	0.1 10V
C24	NBS40JM-686X	TAN.CAPACITOR	68 6.3V
C25	NCBA1AK-104W	CER.CAPACITOR	0.1 10V
C26	NCBA1AK-104W	CER.CAPACITOR	0.1 10V
C27	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C28	NCBA1AK-104W	CER.CAPACITOR	0.1 10V
C29	NCBA1AK-104W	CER.CAPACITOR	0.1 10V
C30	NCBA1AK-104W	CER.CAPACITOR	0.1 10V
C31	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C32	NCB30JK-105X	CER.CAPACITOR	1 6.3V
C33	NCB30JK-105X	CER.CAPACITOR	1 6.3V
C34	NCBA1AK-104W	CER.CAPACITOR	0.1 10V
C37	NCB11AK-106X	CER.CAPACITOR	10 10V
C38	NCB11AK-106X	CER.CAPACITOR	10 10V
C39	NCB11AK-106X	CER.CAPACITOR	10 10V
C40	NCBA1AK-104W	CER.CAPACITOR	0.1 10V
C41	NCBA1AK-104W	CER.CAPACITOR	0.1 10V
C42	NBS40JM-686X	TAN.CAPACITOR	68 6.3V
C43	NCBA1AK-104W	CER.CAPACITOR	0.1 10V
C44	NCBA1AK-104W	CER.CAPACITOR	0.1 10V
C46	NCB30JK-105X	CER.CAPACITOR	1 6.3V
C47	NCB11AK-106X	CER.CAPACITOR	10 10V
C48	NCBA1AK-104W	CER.CAPACITOR	0.1 10V
C50	NCB11AK-106X	CER.CAPACITOR	10 10V
C51	NCB11AK-106X	CER.CAPACITOR	10 10V
C52	NBZ0032-476X	TAN.CAPACITOR	47
LC1	NQR0598-001X	LC FILTER	
LC2	NQR0598-001X	LC FILTER	
LC3	NQR0598-001X	LC FILTER	
LC4	NQR0598-001X	LC FILTER	
LC5	NQR0598-001X	LC FILTER	
LC6	NQR0598-001X	LC FILTER	
J1	QUBD70-X1A1A1-E	SIN TWIST WIRE	
CN27	QGB0801L1-54X	CONNECTOR	54PIN

6.3 ISR BOARD ASSEMBLY PARTS LIST 0 3

CK279300A3 0 3 ☐☐☐☐☐☐

Symbol No.	Part No.	Part Name	Description
IC2	AD9949AKCPZ-W	I.C.(M)	ANALOG DEVICES
IC3	AD9949AKCPZ-W	I.C.(M)	ANALOG DEVICES
IC4	MM3142JN-X	I.C.(M)	MITSUMI
IC5	SN74LVC3G34U-X	I.C.(M)	TEXAS
IC6	SN74LVC3G34U-X	I.C.(M)	TEXAS
IC7	TC7SZ08FU-X	I.C.(M)	TOSHIBA
IC8	TC7SZ08FU-X	I.C.(M)	TOSHIBA
IC10	MM1573DN-X	I.C.(M)	MITSUMI
Q1	2SC5095/O/-X	TRANSISTOR	TOSHIBA
Q2	2SC4250-X	TRANSISTOR	TOSHIBA
Q3	2SC5095/O/-X	TRANSISTOR	TOSHIBA
Q4	2SC4250-X	TRANSISTOR	TOSHIBA
R2	NRSA6AD-103W	M.G.RESISTOR	10k 1/16W
R3	NRSA6AD-103W	M.G.RESISTOR	10k 1/16W
R4	NRSA6AD-332W	M.G.RESISTOR	3.3k 1/16W
R5	NRSA6AD-472W	M.G.RESISTOR	4.7k 1/16W
R7	NRSA6AD-103W	M.G.RESISTOR	10k 1/16W
R8	NRSA6AD-103W	M.G.RESISTOR	10k 1/16W
R9	NRSA6AD-332W	M.G.RESISTOR	3.3k 1/16W
R10	NRSA6AD-472W	M.G.RESISTOR	4.7k 1/16W
R11	NRSA6AJ-0R0W	M.G.RESISTOR	0 1/16W
R12	NRSA6AJ-0R0W	M.G.RESISTOR	0 1/16W
R21	NRSA6AJ-0R0W	M.G.RESISTOR	0 1/16W
R23	NRSA6AD-220W	M.G.RESISTOR	22 1/16W
R24	NRSA6AD-220W	M.G.RESISTOR	22 1/16W
R25	NRSA6AD-220W	M.G.RESISTOR	22 1/16W
R26	NRSA6AD-220W	M.G.RESISTOR	22 1/16W
R27	NRSA6AJ-0R0W	M.G.RESISTOR	0 1/16W
R29	NRSA6AJ-0R0W	M.G.RESISTOR	0 1/16W
R30	NRSA6AJ-0R0W	M.G.RESISTOR	0 1/16W
R31	NRSA6AD-220W	M.G.RESISTOR	22 1/16W
R32	NRSA6AD-220W	M.G.RESISTOR	22 1/16W
R33	NRSA6AJ-0R0W	M.G.RESISTOR	0 1/16W
R34	NRSA6AJ-0R0W	M.G.RESISTOR	0 1/16W
R35	NRSA6AJ-0R0W	M.G.RESISTOR	0 1/16W
R36	NRSA6AJ-0R0W	M.G.RESISTOR	0 1/16W
R37	NRSA6AD-102W	M.G.RESISTOR	1k 1/16W
R38	NRSA6AD-102W	M.G.RESISTOR	1k 1/16W
R39	NRSA6AD-102W	M.G.RESISTOR	1k 1/16W
R40	NRSA6AD-102W	M.G.RESISTOR	1k 1/16W
R41	NRSA6AD-102W	M.G.RESISTOR	1k 1/16W
R42	NRSA6AD-102W	M.G.RESISTOR	1k 1/16W
R43	NRSA6AJ-0R0W	M.G.RESISTOR	0 1/16W
R44	NRSA6AJ-0R0W	M.G.RESISTOR	0 1/16W
R45	NRSA6AD-103W	M.G.RESISTOR	10k 1/16W
R51	NQR0559-009X	C.FERRITE BEADS	5W
R52	NQR0559-009X	C.FERRITE BEADS	5W
R55	NQR0559-009X	C.FERRITE BEADS	5W
R56	NQR0559-009X	C.FERRITE BEADS	5W
R57	NQR0559-009X	C.FERRITE BEADS	5W
R58	NQR0559-009X	C.FERRITE BEADS	5W
R59	NQR0559-009X	C.FERRITE BEADS	5W
R65	NRSA6AJ-0R0W	M.G.RESISTOR	0 1/16W
C1	NCJ11EK-106X-R	CER.CAPACITOR	10 25V
C2	NCJ11EK-106X-R	CER.CAPACITOR	10 25V
C3	NBS41AM-476X	TAN.CAPACITOR	47 10V
C4	NCB11AK-106X	CER.CAPACITOR	10 10V
C5	NCB31EK-473X	CER.CAPACITOR	0.047 25V
C6	NCB31EK-104X	CER.CAPACITOR	0.1 25V
C7	NCB31EK-473X	CER.CAPACITOR	0.047 25V
C8	NCB31HK-222X	CER.CAPACITOR	2200p 50V
C10	NCB31EK-473X	CER.CAPACITOR	0.047 25V
C12	NCB31EK-473X	CER.CAPACITOR	0.047 25V
C13	NBS40JM-686X	TAN.CAPACITOR	68 6.3V
C14	NCBA1AK-104W	CER.CAPACITOR	0.1 10V
C15	NCBA1AK-104W	CER.CAPACITOR	0.1 10V
C16	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C17	NCBA1AK-104W	CER.CAPACITOR	0.1 10V
C18	NCBA1AK-104W	CER.CAPACITOR	0.1 10V
C19	NCBA1AK-104W	CER.CAPACITOR	0.1 10V
C20	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C21	NCB30JK-105X	CER.CAPACITOR	1 6.3V
C22	NCB30JK-105X	CER.CAPACITOR	1 6.3V
C23	NCBA1AK-104W	CER.CAPACITOR	0.1 10V
C24	NBS40JM-686X	TAN.CAPACITOR	68 6.3V
C25	NCBA1AK-104W	CER.CAPACITOR	0.1 10V
C26	NCBA1AK-104W	CER.CAPACITOR	0.1 10V
C27	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C28	NCBA1AK-104W	CER.CAPACITOR	0.1 10V
C29	NCBA1AK-104W	CER.CAPACITOR	0.1 10V
C30	NCBA1AK-104W	CER.CAPACITOR	0.1 10V
C31	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C32	NCB30JK-105X	CER.CAPACITOR	1 6.3V
C33	NCB30JK-105X	CER.CAPACITOR	1 6.3V
C34	NCBA1AK-104W	CER.CAPACITOR	0.1 10V
C37	NCB11AK-106X	CER.CAPACITOR	10 10V
C38	NCB11AK-106X	CER.CAPACITOR	10 10V
C39	NCB11AK-106X	CER.CAPACITOR	10 10V
C40	NCBA1AK-104W	CER.CAPACITOR	0.1 10V
C41	NCBA1AK-104W	CER.CAPACITOR	0.1 10V
C42	NBS40JM-686X	TAN.CAPACITOR	68 6.3V
C43	NCBA1AK-104W	CER.CAPACITOR	0.1 10V
C44	NCBA1AK-104W	CER.CAPACITOR	0.1 10V
C46	NCB30JK-105X	CER.CAPACITOR	1 6.3V
C47	NCB11AK-106X	CER.CAPACITOR	10 10V
C48	NCBA1AK-104W	CER.CAPACITOR	0.1 10V
C50	NCB11AK-106X	CER.CAPACITOR	10 10V
C51	NCB11AK-106X	CER.CAPACITOR	10 10V
C52	NBZ0032-476X	TAN.CAPACITOR	47
LC1	NQR0598-001X	LC FILTER	
LC2	NQR0598-001X	LC FILTER	
LC3	NQR0598-001X	LC FILTER	
LC4	NQR0598-001X	LC FILTER	
LC5	NQR0598-001X	LC FILTER	
LC6	NQR0598-001X	LC FILTER	
J1	QUBD70-X1A1A1-E	SIN TWIST WIRE	
CN28	QGB0801L1-54X	CONNECTOR	54PIN

6.4 MAIN BOARD ASSEMBLY PARTS LIST 1 0

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Symbol No.	Part No.	Part Name	Description
IC1	JCY0210	I.C.(M)	JVC
IC2	SC192IML-X	I.C.(M)	SEMTECH
IC3	BU3095-0CFV-X	I.C.(M)	ROHM
IC4	BU3095-0CFV-X	I.C.(M)	ROHM
IC5	JCP8076-2	I.C.(M)	JVC
IC6	LMH6654MF-N-X	I.C.(M)	NATIONAL SEMICO
IC7	LMH6654MF-N-X	I.C.(M)	NATIONAL SEMICO
IC8	LMH6654MF-N-X	I.C.(M)	NATIONAL SEMICO
IC14	TA75S01F-X	I.C.(M)	TOSHIBA
IC15	LM4040CIM3-2.5X	I.C.(M)	NATIONAL SEMICO
IC22	SN74AHC2G53T-X	I.C.(M)	TEXAS
IC23	SN74AHC2G53T-X	I.C.(M)	TEXAS
IC24	SN74AHC2G53T-X	I.C.(M)	TEXAS
IC25	SC192IML-X	I.C.(M)	TEXAS
IC27	TC74VHC161FT-X	I.C.(M)	TOSHIBA
IC28	TC7SH04FU-X	I.C.(M)	TOSHIBA
IC29	MK3720DLF-X	I.C.(M)	INTEGRATED CIRC
IC30	TC7SH04FU-X	I.C.(M)	TOSHIBA
IC31	TC7SH04FU-X	I.C.(M)	TOSHIBA
IC32	TC7SZ08FU-X	I.C.(M)	TOSHIBA
IC34	TC7SZ08FU-X	I.C.(M)	TOSHIBA
IC35	TC7WZ74FU-X	I.C.(M)	TOSHIBA
IC36	TC7SZ08FU-X	I.C.(M)	TOSHIBA
IC38	TC7SH04FU-X	I.C.(M)	TOSHIBA
IC39	TC7SH04FU-X	I.C.(M)	TOSHIBA
IC40	TC7SH04FU-X	I.C.(M)	TOSHIBA
IC41	ICS570BLF-X	I.C.(M)	ICS
IC42	TC7SZ08FU-X	I.C.(M)	TOSHIBA
IC43	ICS660GILF-X	I.C.(M)	ICS
IC45	TC7SH04FU-X	I.C.(M)	TOSHIBA
IC46	XC3S20004FG676C	I.C.(M)	PLSC1595
IC47	K4S643233H-HN75	I.C.(M)	SAMSUNG
IC48	UPD6467GR533A-X	I.C.(M)	NEC
IC49	UPD6467GR533A-X	I.C.(M)	NEC
IC50	XC3S10004FG320C	I.C.(M)	PLSC1596
IC51	ADV7123KSTZ50	I.C.(M)	ANALOG DEVICES
IC52	ADV7123KSTZ50	I.C.(M)	ANALOG DEVICES
IC53	K4S643233H-HN75	I.C.(M)	SAMSUNG
IC54	PLSC1591	I.C.(M)	HD64F2368VTE34V
IC55	NJM2904V-X	I.C.(M)	JRC
IC56	TC7W34FU-X	I.C.(M)	TOSHIBA
IC57	M95320-WMN6P-X	I.C.(M)	MITSUBISHI
IC70	M95320-WMN6P-X	I.C.(M)	MITSUBISHI
IC71	PLSC1594	I.C.(M)	MN103SF66R
IC72	TC7W14FU-X	I.C.(M)	TOSHIBA
IC73	MM1572KN-X	I.C.(M)	MITSUMI
IC74	MM1571JN-X	I.C.(M)	MITSUMI
IC75	M62366GP-D-X	I.C.(M)	MITSUBISHI
IC76	JCY0136-X	I.C.(M)	JVC
IC77	TLC2933IPW-X	I.C.(M)	TEXAS
IC78	TC7W53FU-X	I.C.(M)	TOSHIBA
IC79	JCY0152-2	I.C.(M)	JVC
IC81	TC7SZ02FU-X	I.C.(M)	TOSHIBA
IC82	TC7WH241FU-X	I.C.(M)	TOSHIBA
IC84	K4S641633H-BN75	I.C.(M)	SAMSUNG
IC86	JCY0173	I.C.(M)	JVC
IC88	MN5774	I.C.(M)	MATSUSHITA
IC89	TSB41AB2PAP	I.C.(M)	TEXAS
IC90	SN74AHC1G08K-X	I.C.(M)	TEXAS
IC91	PLSL1187	I.C.(M)	NLC0459APB
IC92	BU2288FV-X	I.C.(M)	ROHM
IC93	DS1232AASE60TTE	I.C.(M)	NATIONAL SEMICO
IC94	SA16D70BFI02A02	I.C.(M)	FUJITSU
IC95	DS1232AASE60TTE	I.C.(M)	NATIONAL SEMICO
IC102	CXD3400N-X	I.C.(M)	SONY
IC103	CXD3400N-X	I.C.(M)	SONY
IC104	CXD3400N-X	I.C.(M)	SONY
IC105	SC192IML-X	I.C.(M)	SEMTECH
IC106	XC3S10004FG320C	I.C.(M)	PLSC1597
IC107	K4S643233H-HN75	I.C.(M)	SAMSUNG
IC108	AK4363VF-X	I.C.(M)	ASAHI KASEI
IC110	LTC3411EDD-X	I.C.(M)	LINEAR
IC111	SC192IML-X	I.C.(M)	SEMTECH
IC112	SC192IML-X	I.C.(M)	SEMTECH
IC113	LTC3414EFE-X	I.C.(M)	LINEAR
IC114	TC7SH04FU-X	I.C.(M)	TOSHIBA
IC115	MM1571JN-X	I.C.(M)	MITSUMI
Q1	DTC124EUA-X	TRANSISTOR	ROHM
Q2	DTA124EUA-X	TRANSISTOR	ROHM
Q3	DTC124EUA-X	TRANSISTOR	ROHM
Q4	DTA124EUA-X	TRANSISTOR	ROHM
Q5	DTC124EUA-X	TRANSISTOR	ROHM
Q6	DTA124EUA-X	TRANSISTOR	ROHM
Q7	DTC124EUA-X	TRANSISTOR	ROHM
Q8	DTC124EUA-X	TRANSISTOR	ROHM
Q25	DTA114EUA-X	TRANSISTOR	ROHM
Q26	UMC3N-W	TRANSISTOR	ROHM
Q27	UMC3N-W	TRANSISTOR	ROHM
Q28	DTC143EUA-X	TRANSISTOR	ROHM
Q37	DTC124EUA-X	TRANSISTOR	ROHM
Q38	RSQ035P03-W	TRANSISTOR	ROHM
Q39	RTQ035N03-W	TRANSISTOR	MITSUBISHI
Q100	2SC4626J/BC/-X	TRANSISTOR	MATSUSHITA
D1	1SS357-X	DIODE	TOSHIBA
D21	DAN202U-X	DIODE	ROHM
D22	DAN202U-X	DIODE	ROHM
D23	EC2C01C-TR-X	VARI CAP DIODE	SANYO
D24	EC2C01C-TR-X	VARI CAP DIODE	SANYO
D25	EC2C01C-TR-X	VARI CAP DIODE	SANYO
D48	MA142A-X	DIODE	MATSUSHITA
D49	MA142A-X	DIODE	MATSUSHITA
D50	MA142A-X	DIODE	MATSUSHITA
D51	MA142A-X	DIODE	MATSUSHITA
D100	MA8091/L/-X	ZENER DIODE	MATSUSHITA
R15	NRSA6AJ-0R0W	M.G.RESISTOR	0 1/16W
R27	NRSA6AJ-0R0W	M.G.RESISTOR	0 1/16W
R28	NRSA6AJ-0R0W	M.G.RESISTOR	0 1/16W
R34	NRSA6AJ-0R0W	M.G.RESISTOR	0 1/16W
R49	NRSA6AD-124W	M.G.RESISTOR	120k 1/16W
R50	NRSA6AD-123W	M.G.RESISTOR	12k 1/16W
R51	NRSA6AJ-0R0W	M.G.RESISTOR	0 1/16W
R52	NRSA6AD-394W	M.G.RESISTOR	390k 1/16W
R53	NRSA6AJ-0R0W	M.G.RESISTOR	0 1/16W
R55	NRSA6AJ-0R0W	M.G.RESISTOR	0 1/16W
R83	NRSA6AD-272W	M.G.RESISTOR	2.7k 1/16W
R85	NRSA6AD-272W	M.G.RESISTOR	2.7k 1/16W
R89	NRSA6AJ-0R0W	M.G.RESISTOR	0 1/16W
R91	NRSA6AD-153W	M.G.RESISTOR	15k 1/16W
R92	NRSA6AD-103W	M.G.RESISTOR	10k 1/16W
R99	NRSA6AD-473W	M.G.RESISTOR	47k 1/16W
R100	NRSA6AD-473W	M.G.RESISTOR	47k 1/16W
R101	NRSA6AD-473W	M.G.RESISTOR	47k 1/16W
R102	NRSA6AD-473W	M.G.RESISTOR	47k 1/16W
R103	NRSA63J-150X	M.G.RESISTOR	15 1/16W
R105	NRSA6AD-272W	M.G.RESISTOR	2.7k 1/16W
R108	NRSA6AD-821W	M.G.RESISTOR	820 1/16W
R109	NRSA6AD-220W	M.G.RESISTOR	22 1/16W
R110	NRSA6AD-680W	M.G.RESISTOR	68 1/16W
R111	NRSA63D-392X	M.G.RESISTOR	3.9k 1/16W
R112	NRSA63D-473X	M.G.RESISTOR	47k 1/16W
R113	NRSA63D-112X	M.G.RESISTOR	1.1k 1/16W
R114	NRSA63D-332X	M.G.RESISTOR	3.3k 1/16W
R115	NRSA63D-392X	M.G.RESISTOR	3.9k 1/16W
R116	NRSA63D-473X	M.G.RESISTOR	47k 1/16W
R117	NRSA63D-112X	M.G.RESISTOR	1.1k 1/16W
R118	NRSA63D-332X	M.G.RESISTOR	3.3k 1/16W
R119	NRSA63D-182X	M.G.RESISTOR	1.8k 1/16W
R120	NRSA63D-183X	M.G.RESISTOR	18k 1/16W
R121	NRSA63D-112X	M.G.RESISTOR	1.1k 1/16W
R122	NRSA63D-821X	M.G.RESISTOR	820 1/16W
R123	NRSA63D-102X	M.G.RESISTOR	1k 1/16W
R124	NRSA63D-102X	M.G.RESISTOR	1k 1/16W

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Symbol No.	Part No.	Part Name	Description	
R125	NRSA63D-102X	M.G.RESISTOR	1k	1/16W
R128	NRSA6AD-151W	M.G.RESISTOR	150	1/16W
R129	NRSA6AD-151W	M.G.RESISTOR	150	1/16W
R130	NRSA6AD-151W	M.G.RESISTOR	150	1/16W
R153	NRSA6AD-151W	M.G.RESISTOR	150	1/16W
R156	NRSA6AD-151W	M.G.RESISTOR	150	1/16W
R159	NRSA6AD-151W	M.G.RESISTOR	150	1/16W
R174	NRSA6AD-270W	M.G.RESISTOR	27	1/16W
R175	NRSA6AD-270W	M.G.RESISTOR	27	1/16W
R176	NRSA6AD-270W	M.G.RESISTOR	27	1/16W
R177	NRSA6AD-124W	M.G.RESISTOR	120k	1/16W
R178	NRSA6AD-123W	M.G.RESISTOR	12k	1/16W
R179	NRSA6AD-103W	M.G.RESISTOR	10k	1/16W
R180	NRSA6AD-394W	M.G.RESISTOR	390k	1/16W
R181	NRSA6AJ-0R0W	M.G.RESISTOR	0	1/16W
R183	NRSA6AJ-0R0W	M.G.RESISTOR	0	1/16W
R185	NRSA6AD-103W	M.G.RESISTOR	10k	1/16W
R186	NRSA6AD-103W	M.G.RESISTOR	10k	1/16W
R187	NRSA6AD-472W	M.G.RESISTOR	4.7k	1/16W
R188	NRSA6AD-470W	M.G.RESISTOR	47	1/16W
R189	NRSA6AD-470W	M.G.RESISTOR	47	1/16W
R190	NRSA6AD-470W	M.G.RESISTOR	47	1/16W
R191	NRSA6AD-470W	M.G.RESISTOR	47	1/16W
R192	NRSA6AD-470W	M.G.RESISTOR	47	1/16W
R193	NRSA6AD-470W	M.G.RESISTOR	47	1/16W
R194	NRSA6AD-470W	M.G.RESISTOR	47	1/16W
R195	NRSA6AD-470W	M.G.RESISTOR	47	1/16W
R196	NRSA6AD-103W	M.G.RESISTOR	10k	1/16W
R197	NRSA6AJ-0R0W	M.G.RESISTOR	0	1/16W
R198	NRSA6AJ-0R0W	M.G.RESISTOR	0	1/16W
R200	NRSA6AD-220W	M.G.RESISTOR	22	1/16W
R201	NRSA6AD-220W	M.G.RESISTOR	22	1/16W
R202	NRSA6AD-220W	M.G.RESISTOR	22	1/16W
R203	NRSA6AD-220W	M.G.RESISTOR	22	1/16W
R204	NRSA6AD-220W	M.G.RESISTOR	22	1/16W
R205	NRSA6AD-470W	M.G.RESISTOR	47	1/16W
R206	NRSA6AD-470W	M.G.RESISTOR	47	1/16W
R207	NRSA6AD-220W	M.G.RESISTOR	22	1/16W
R208	NRSA6AD-220W	M.G.RESISTOR	22	1/16W
R209	NRSA6AD-220W	M.G.RESISTOR	22	1/16W
R210	NRSA6AD-220W	M.G.RESISTOR	22	1/16W
R211	NRSA6AD-220W	M.G.RESISTOR	22	1/16W
R212	NRSA6AD-220W	M.G.RESISTOR	22	1/16W
R213	NRSA6AD-220W	M.G.RESISTOR	22	1/16W
R214	NRSA6AD-220W	M.G.RESISTOR	22	1/16W
R215	NRSA6AD-102W	M.G.RESISTOR	1k	1/16W
R216	NRSA6AD-102W	M.G.RESISTOR	1k	1/16W
R217	NRSA6AD-102W	M.G.RESISTOR	1k	1/16W
R218	NRSA6AD-102W	M.G.RESISTOR	1k	1/16W
R219	NRSA6AJ-0R0W	M.G.RESISTOR	0	1/16W
R220	NRSA6AJ-0R0W	M.G.RESISTOR	0	1/16W
R223	NRSA6AJ-3R9W	M.G.RESISTOR	3.9	1/16W
R225	NRSA6AJ-3R9W	M.G.RESISTOR	3.9	1/16W
R226	NRSA6AJ-3R9W	M.G.RESISTOR	3.9	1/16W
R227	NRSA6AJ-3R9W	M.G.RESISTOR	3.9	1/16W
R228	NRSA6AJ-3R9W	M.G.RESISTOR	3.9	1/16W
R229	NRSA6AJ-3R9W	M.G.RESISTOR	3.9	1/16W
R230	NRSA6AJ-3R9W	M.G.RESISTOR	3.9	1/16W
R231	NRSA6AJ-3R9W	M.G.RESISTOR	3.9	1/16W
R232	NRSA6AJ-3R9W	M.G.RESISTOR	3.9	1/16W
R233	NRSA6AJ-3R9W	M.G.RESISTOR	3.9	1/16W
R234	NRSA6AJ-3R9W	M.G.RESISTOR	3.9	1/16W
R235	NRSA6AJ-3R9W	M.G.RESISTOR	3.9	1/16W
R236	NRSA6AJ-3R9W	M.G.RESISTOR	3.9	1/16W
R237	NRSA6AJ-3R9W	M.G.RESISTOR	3.9	1/16W
R238	NRSA6AJ-3R9W	M.G.RESISTOR	3.9	1/16W
R239	NRSA6AJ-3R9W	M.G.RESISTOR	3.9	1/16W
R242	NRSA6AJ-0R0W	M.G.RESISTOR	0	1/16W
R244	NRSA6AJ-3R9W	M.G.RESISTOR	3.9	1/16W
R245	NRSA6AJ-3R9W	M.G.RESISTOR	3.9	1/16W
R246	NRSA6AJ-3R9W	M.G.RESISTOR	3.9	1/16W
R247	NRSA6AJ-3R9W	M.G.RESISTOR	3.9	1/16W
R248	NRSA6AJ-3R9W	M.G.RESISTOR	3.9	1/16W
R249	NRSA6AJ-3R9W	M.G.RESISTOR	3.9	1/16W
R250	NRSA6AJ-3R9W	M.G.RESISTOR	3.9	1/16W
R251	NRSA6AJ-3R9W	M.G.RESISTOR	3.9	1/16W
R252	NRSA6AJ-3R9W	M.G.RESISTOR	3.9	1/16W
R253	NRSA6AD-102W	M.G.RESISTOR	1k	1/16W
R254	NRSA6AJ-3R9W	M.G.RESISTOR	3.9	1/16W
R255	NRSA6AJ-3R9W	M.G.RESISTOR	3.9	1/16W
R256	NRSA6AJ-3R9W	M.G.RESISTOR	3.9	1/16W
R257	NRSA6AD-102W	M.G.RESISTOR	1k	1/16W
R258	NRSA6AJ-0R0W	M.G.RESISTOR	0	1/16W
R259	NRSA6AJ-0R0W	M.G.RESISTOR	0	1/16W
R260	NRSA6AJ-3R9W	M.G.RESISTOR	3.9	1/16W
R261	NRSA6AD-102W	M.G.RESISTOR	1k	1/16W
R262	NRSA6AD-102W	M.G.RESISTOR	1k	1/16W
R263	NRSA6AJ-3R9W	M.G.RESISTOR	3.9	1/16W
R264	NRSA6AD-222W	M.G.RESISTOR	2.2k	1/16W
R265	NRSA6AD-222W	M.G.RESISTOR	2.2k	1/16W
R267	NRSA6AJ-0R0W	M.G.RESISTOR	0	1/16W
R268	NRSA6AJ-0R0W	M.G.RESISTOR	0	1/16W
R271	NRSA6AD-151W	M.G.RESISTOR	150	1/16W
R272	NRSA6AD-151W	M.G.RESISTOR	150	1/16W
R274	NRSA6AD-151W	M.G.RESISTOR	150	1/16W
R275	NRSA6AD-151W	M.G.RESISTOR	150	1/16W
R276	NRSA6AD-151W	M.G.RESISTOR	150	1/16W
R277	NRSA6AD-151W	M.G.RESISTOR	150	1/16W
R281	NRSA6AD-473W	M.G.RESISTOR	47k	1/16W
R283	NRSA6AD-473W	M.G.RESISTOR	47k	1/16W
R284	NRSA6AD-473W	M.G.RESISTOR	47k	1/16W
R285	NRSA6AD-473W	M.G.RESISTOR	47k	1/16W
R286	NRSA6AD-473W	M.G.RESISTOR	47k	1/16W
R287	NRSA6AD-473W	M.G.RESISTOR	47k	1/16W
R288	NRSA6AD-473W	M.G.RESISTOR	47k	1/16W
R289	NRSA6AJ-0R0W	M.G.RESISTOR	0	1/16W
R291	NRSA6AD-473W	M.G.RESISTOR	47k	1/16W
R292	NRSA6AD-473W	M.G.RESISTOR	47k	1/16W
R293	NRSA6AD-102W	M.G.RESISTOR	1k	1/16W
R294	NRSA6AD-473W	M.G.RESISTOR	47k	1/16W
R295	NRSA6AD-473W	M.G.RESISTOR	47k	1/16W
R296	NRSA6AD-473W	M.G.RESISTOR	47k	1/16W
R297	NRSA6AJ-105W	M.G.RESISTOR	1M	1/16W
R298	NRSA6AJ-0R0W	M.G.RESISTOR	0	1/16W
R299	NRSA6AJ-0R0W	M.G.RESISTOR	0	1/16W
R300	NRSA6AD-473W	M.G.RESISTOR	47k	1/16W
R301	NRSA6AD-473W	M.G.RESISTOR	47k	1/16W
R302	NRSA6AD-473W	M.G.RESISTOR	47k	1/16W
R303	NRSA6AD-473W	M.G.RESISTOR	47k	1/16W
R305	NRSA6AD-473W	M.G.RESISTOR	47k	1/16W
R306	NRSA6AD-473W	M.G.RESISTOR	47k	1/16W
R307	NRSA6AD-473W	M.G.RESISTOR	47k	1/16W
R308	NRSA6AD-473W	M.G.RESISTOR	47k	1/16W
R309	NRSA6AD-182W	M.G.RESISTOR	1.8k	1/16W
R310	NRSA6AD-473W	M.G.RESISTOR	47k	1/16W
R311	NRSA6AD-222W	M.G.RESISTOR	2.2k	1/16W
R312	NRSA6AD-124W	M.G.RESISTOR	120k	1/16W
R313	NRSA6AD-124W	M.G.RESISTOR	120k	1/16W
R314	NRSA6AD-103W	M.G.RESISTOR	10k	1/16W
R315	NRSA6AD-473W	M.G.RESISTOR	47k	1/16W
R317	NRSA6AD-473W	M.G.RESISTOR	47k	1/16W
R321	NRSA6AD-473W	M.G.RESISTOR	47k	1/16W
R323	NRSA6AD-473W	M.G.RESISTOR	47k	1/16W
R324	NRSA6AD-392W	M.G.RESISTOR	3.9k	1/16W
R325	NRSA6AD-392W	M.G.RESISTOR	3.9k	1/16W
R326	NRSA6AD-473W	M.G.RESISTOR	47k	1/16W
R327	NRSA6AD-392W	M.G.RESISTOR	3.9k	1/16W
R328	NRSA6AD-473W	M.G.RESISTOR	47k	1/16W
R329	NRSA6AD-622W	M.G.RESISTOR	6.2k	1/16W
R330	NRSA6AD-622W	M.G.RESISTOR	6.2k	1/16W
R331	NRSA6AD-622W	M.G.RESISTOR	6.2k	1/16W
R332	NRSA6AD-473W	M.G.RESISTOR	47k	1/16W
R333	NRSA6AD-330W	M.G.RESISTOR	33	1/16W
R334	NRSA6AD-473W	M.G.RESISTOR	47k	1/16W
R335	NRSA6AD-473W	M.G.RESISTOR	47k	1/16W

Symbol No.	Part No.	Part Name	Description	
R336	NRSA6AD-103W	M.G.RESISTOR	10k	1/16W
R337	NRSA6AD-473W	M.G.RESISTOR	47k	1/16W
R338	NRSA6AD-473W	M.G.RESISTOR	47k	1/16W
R339	NRSA6AD-473W	M.G.RESISTOR	47k	1/16W
R340	NRSA6AD-473W	M.G.RESISTOR	47k	1/16W
R342	NRSA6AD-473W	M.G.RESISTOR	47k	1/16W
R344	NRSA6AD-473W	M.G.RESISTOR	47k	1/16W
R346	NRSA6AD-473W	M.G.RESISTOR	47k	1/16W
R347	NRSA6AD-473W	M.G.RESISTOR	47k	1/16W
R349	NRSA6AD-103W	M.G.RESISTOR	10k	1/16W
R350	NRSA6AD-473W	M.G.RESISTOR	47k	1/16W
R353	NRSA6AD-473W	M.G.RESISTOR	47k	1/16W
R354	NRSA6AD-473W	M.G.RESISTOR	47k	1/16W
R355	NRSA6AD-473W	M.G.RESISTOR	47k	1/16W
R356	NRSA6AD-473W	M.G.RESISTOR	47k	1/16W
R357	NRSA6AJ-0R0W	M.G.RESISTOR	0	1/16W
R359	NRSA6AD-101W	M.G.RESISTOR	100	1/16W
R360	NRSA6AD-101W	M.G.RESISTOR	100	1/16W
R361	NRSA6AD-101W	M.G.RESISTOR	100	1/16W
R362	NRSA6AD-101W	M.G.RESISTOR	100	1/16W
R363	NRSA6AD-101W	M.G.RESISTOR	100	1/16W
R364	NRSA6AD-101W	M.G.RESISTOR	100	1/16W
R365	NRSA6AD-101W	M.G.RESISTOR	100	1/16W
R366	NRSA6AD-101W	M.G.RESISTOR	100	1/16W
R367	NRSA6AD-101W	M.G.RESISTOR	100	1/16W
R514	NRSA6AD-473W	M.G.RESISTOR	47k	1/16W
R532	NRSA6AD-473W	M.G.RESISTOR	47k	1/16W
R536	NRSA6AD-473W	M.G.RESISTOR	47k	1/16W
R537	NRSA6AD-473W	M.G.RESISTOR	47k	1/16W
R539	NRSA6AD-473W	M.G.RESISTOR	47k	1/16W
R567	NRSA6AD-103W	M.G.RESISTOR	10k	1/16W
R568	NRSA6AD-103W	M.G.RESISTOR	10k	1/16W
R569	NRSA6AJ-0R0W	M.G.RESISTOR	0	1/16W
R570	NRSA6AD-103W	M.G.RESISTOR	10k	1/16W
R571	NRSA6AD-473W	M.G.RESISTOR	47k	1/16W
R572	NRSA6AD-103W	M.G.RESISTOR	10k	1/16W
R573	NRSA6AD-103W	M.G.RESISTOR	10k	1/16W
R574	NRSA6AD-103W	M.G.RESISTOR	10k	1/16W
R575	NRSA6AD-103W	M.G.RESISTOR	10k	1/16W
R576	NRSA6AD-103W	M.G.RESISTOR	10k	1/16W
R577	NRSA6AD-103W	M.G.RESISTOR	10k	1/16W
R578	NRSA6AD-103W	M.G.RESISTOR	10k	1/16W
R579	NRSA6AD-103W	M.G.RESISTOR	10k	1/16W
R580	NRSA6AJ-0R0W	M.G.RESISTOR	0	1/16W
R581	NRSA6AD-390W	M.G.RESISTOR	39	1/16W
R582	NRSA6AD-103W	M.G.RESISTOR	10k	1/16W
R583	NRSA6AD-103W	M.G.RESISTOR	10k	1/16W
R584	NRSA6AD-332W	M.G.RESISTOR	3.3k	1/16W
R585	NRSA6AD-332W	M.G.RESISTOR	3.3k	1/16W
R587	NRSA6AJ-0R0W	M.G.RESISTOR	0	1/16W
R589	NRSA6AD-332W	M.G.RESISTOR	3.3k	1/16W
R590	NRSA6AD-332W	M.G.RESISTOR	3.3k	1/16W
R593	NRSA6AD-102W	M.G.RESISTOR	1k	1/16W
R594	NRSA6AD-102W	M.G.RESISTOR	1k	1/16W
R595	NRSA6AD-273W	M.G.RESISTOR	27k	1/16W
R596	NRSA6AD-104W	M.G.RESISTOR	100k	1/16W
R597	NRSA6AD-330W	M.G.RESISTOR	33	1/16W
R598	NRSA6AD-104W	M.G.RESISTOR	100k	1/16W
R599	NRSA6AD-473W	M.G.RESISTOR	47k	1/16W
R600	NRSA6AD-473W	M.G.RESISTOR	47k	1/16W
R601	NRSA6AD-332W	M.G.RESISTOR	3.3k	1/16W
R602	NRSA6AD-101W	M.G.RESISTOR	100	1/16W
R603	NRSA6AD-332W	M.G.RESISTOR	3.3k	1/16W
R604	NRSA6AD-332W	M.G.RESISTOR	3.3k	1/16W
R605	NRSA6AD-101W	M.G.RESISTOR	100	1/16W
R606	NRSA6AD-104W	M.G.RESISTOR	100k	1/16W
R607	NRSA6AD-103W	M.G.RESISTOR	10k	1/16W
R608	NRSA6AD-104W	M.G.RESISTOR	100k	1/16W
R609	NRSA6AD-104W	M.G.RESISTOR	100k	1/16W
R610	NRSA6AD-101W	M.G.RESISTOR	100	1/16W
R611	NRSA6AD-103W	M.G.RESISTOR	10k	1/16W
R612	NRSA6AD-332W	M.G.RESISTOR	3.3k	1/16W
R613	NRSA6AD-102W	M.G.RESISTOR	1k	1/16W

Symbol No.	Part No.	Part Name	Description	
R614	NRSA6AD-102W	M.G.RESISTOR	1k	1/16W
R615	NRSA6AD-222W	M.G.RESISTOR	2.2k	1/16W
R616	NRSA6AD-102W	M.G.RESISTOR	1k	1/16W
R617	NRSA6AJ-0R0W	M.G.RESISTOR	0	1/16W
R618	NRSA6AD-101W	M.G.RESISTOR	100	1/16W
R619	NRSA6AD-101W	M.G.RESISTOR	100	1/16W
R620	NRSA6AD-101W	M.G.RESISTOR	100	1/16W
R621	NRSA6AD-101W	M.G.RESISTOR	100	1/16W
R622	NRSA6AD-101W	M.G.RESISTOR	100	1/16W
R623	NRSA6AD-101W	M.G.RESISTOR	100	1/16W
R624	NRSA6AD-101W	M.G.RESISTOR	100	1/16W
R625	NRSA6AD-101W	M.G.RESISTOR	100	1/16W
R626	NRSA6AD-103W	M.G.RESISTOR	10k	1/16W
R627	NRSA6AD-103W	M.G.RESISTOR	10k	1/16W
R628	NRSA6AD-103W	M.G.RESISTOR	10k	1/16W
R629	NRSA6AD-221W	M.G.RESISTOR	220	1/16W
R630	NRSA6AD-182W	M.G.RESISTOR	1.8k	1/16W
R631	NRSA6AD-471W	M.G.RESISTOR	470	1/16W
R632	NRSA6AD-220W	M.G.RESISTOR	22	1/16W
R634	NRSA6AJ-0R0W	M.G.RESISTOR	0	1/16W
R635	NRSA6AD-102W	M.G.RESISTOR	1k	1/16W
R636	NRSA6AD-102W	M.G.RESISTOR	1k	1/16W
R642	NRSA6AD-122W	M.G.RESISTOR	1.2k	1/16W
R644	NRSA6AJ-0R0W	M.G.RESISTOR	0	1/16W
R645	NRSA6AD-103W	M.G.RESISTOR	10k	1/16W
R646	NRSA6AD-102W	M.G.RESISTOR	1k	1/16W
R648	NRSA6AD-151W	M.G.RESISTOR	150	1/16W
R649	NRSA6AD-302W	M.G.RESISTOR	3k	1/16W
R650	NRSA6AD-151W	M.G.RESISTOR	150	1/16W
R651	NRSA6AD-302W	M.G.RESISTOR	3k	1/16W
R652	NRSA6AJ-0R0W	M.G.RESISTOR	0	1/16W
R653	NRSA6AJ-0R0W	M.G.RESISTOR	0	1/16W
R654	NRSA6AD-220W	M.G.RESISTOR	22	1/16W
R655	NRSA6AD-220W	M.G.RESISTOR	22	1/16W
R656	NRSA6AJ-0R0W	M.G.RESISTOR	0	1/16W
R659	NRSA6AD-562W	M.G.RESISTOR	5.6k	1/16W
R661	NRSA6AD-103W	M.G.RESISTOR	10k	1/16W
R662	NRSA6AD-222W	M.G.RESISTOR	2.2k	1/16W
R663	NRSA6AD-103W	M.G.RESISTOR	10k	1/16W
R664	NRSA6AD-224W	M.G.RESISTOR	220k	1/16W
R665	NRSA6AD-222W	M.G.RESISTOR	2.2k	1/16W
R667	NRSA6AD-242W	M.G.RESISTOR	2.4k	1/16W
R668	NRSA6AD-392W	M.G.RESISTOR	3.9k	1/16W
R669	NRSA6AD-392W	M.G.RESISTOR	3.9k	1/16W
R670	NRSA6AD-560W	M.G.RESISTOR	56	1/16W
R671	NRSA6AD-560W	M.G.RESISTOR	56	1/16W
R672	NRSA6AD-333W	M.G.RESISTOR	33k	1/16W
R673	NRSA6AD-560W	M.G.RESISTOR	56	1/16W
R674	NRSA6AD-560W	M.G.RESISTOR	56	1/16W
R675	NRSA6AD-103W	M.G.RESISTOR	10k	1/16W
R679	NRSA6AD-512W	M.G.RESISTOR	5.1k	1/16W
R680	NRSA6AJ-105W	M.G.RESISTOR	1M	1/16W
R681	NRSA6AD-103W	M.G.RESISTOR	10k	1/16W
R683	NRSA6AJ-0R0W	M.G.RESISTOR	0	1/16W
R684	NRSA6AD-681W	M.G.RESISTOR	680	1/16W
R686	NRSA6AD-103W	M.G.RESISTOR	10k	1/16W
R687	NRSA6AD-103W	M.G.RESISTOR	10k	1/16W
R688	NRSA6AD-471W	M.G.RESISTOR	470	1/16W
R689	NRSA6AJ-0R0W	M.G.RESISTOR	0	1/16W
R691	NRSA6AD-103W	M.G.RESISTOR	10k	1/16W
R693	NRSA6AD-224W	M.G.RESISTOR	220k	1/16W
R695	NRSA6AD-222W	M.G.RESISTOR	2.2k	1/16W
R696	NRSA6AD-224W	M.G.RESISTOR	220k	1/16W
R698	NRSA6AD-330W	M.G.RESISTOR	33	1/16W
R711	NRSA6AD-330W	M.G.RESISTOR	33	1/16W
R712	NRSA6AD-330W	M.G.RESISTOR	33	1/16W
R750	NRSA6AJ-0R0W	M.G.RESISTOR	0	1/16W
R751	NRSA6AJ-0R0W	M.G.RESISTOR	0	1/16W
R752	NRSA6AD-470W	M.G.RESISTOR	47	1/16W
R754	NRSA6AJ-0R0W	M.G.RESISTOR	0	1/16W
R755	NRSA6AD-470W	M.G.RESISTOR	47	1/16W
R757	NRSA6AJ-0R0W	M.G.RESISTOR	0	1/16W
R758	NRSA6AJ-0R0W	M.G.RESISTOR	0	1/16W

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Symbol No.	Part No.	Part Name	Description	
R760	NRSA6AJ-0R0W	M.G.RESISTOR	0	1/16W
R761	NRSA6AD-103W	M.G.RESISTOR	10k	1/16W
R767	NRSA6AJ-0R0W	M.G.RESISTOR	0	1/16W
R770	NRSA6AD-220W	M.G.RESISTOR	22	1/16W
R771	NRSA6AD-220W	M.G.RESISTOR	22	1/16W
R772	NRSA6AJ-0R0W	M.G.RESISTOR	0	1/16W
R785	NRSA6AD-104W	M.G.RESISTOR	100k	1/16W
R786	NRSA6AD-104W	M.G.RESISTOR	100k	1/16W
R787	NRSA6AD-101W	M.G.RESISTOR	100	1/16W
R788	NRSA6AD-104W	M.G.RESISTOR	100k	1/16W
R790	NRSA6AD-103W	M.G.RESISTOR	10k	1/16W
R791	NRSA6AJ-105W	M.G.RESISTOR	1M	1/16W
R792	NRSA6AD-103W	M.G.RESISTOR	10k	1/16W
R793	NRSA6AD-394W	M.G.RESISTOR	390k	1/16W
R794	NRSA6AD-102W	M.G.RESISTOR	1k	1/16W
R796	NRSA6AD-562W	M.G.RESISTOR	5.6k	1/16W
R797	NRSA6AD-751W	M.G.RESISTOR	750	1/16W
R798	NRSA6AD-560W	M.G.RESISTOR	56	1/16W
R799	NRSA6AD-560W	M.G.RESISTOR	56	1/16W
R800	NRSA6AD-560W	M.G.RESISTOR	56	1/16W
R801	NRSA6AD-560W	M.G.RESISTOR	56	1/16W
R802	NRSA6AD-512W	M.G.RESISTOR	5.1k	1/16W
R803	NRSA6AJ-0R0W	M.G.RESISTOR	0	1/16W
R804	NRSA6AD-473W	M.G.RESISTOR	47k	1/16W
R805	NRSA6AD-470W	M.G.RESISTOR	47	1/16W
R806	NRSA6AD-473W	M.G.RESISTOR	47k	1/16W
R807	NRSA6AD-470W	M.G.RESISTOR	47	1/16W
R808	NRSA6AD-473W	M.G.RESISTOR	47k	1/16W
R809	NRSA6AD-470W	M.G.RESISTOR	47	1/16W
R810	NRSA6AD-470W	M.G.RESISTOR	47	1/16W
R811	NRSA6AD-470W	M.G.RESISTOR	47	1/16W
R816	NRSA6AD-102W	M.G.RESISTOR	1k	1/16W
R818	NRSA6AD-102W	M.G.RESISTOR	1k	1/16W
R819	NRSA6AD-102W	M.G.RESISTOR	1k	1/16W
R821	NRSA6AD-102W	M.G.RESISTOR	1k	1/16W
R822	NRSA6AD-104W	M.G.RESISTOR	100k	1/16W
R823	NRSA6AD-104W	M.G.RESISTOR	100k	1/16W
R824	NRSA6AD-104W	M.G.RESISTOR	100k	1/16W
R825	NRSA6AD-104W	M.G.RESISTOR	100k	1/16W
R826	NRSA6AD-104W	M.G.RESISTOR	100k	1/16W
R828	NRSA6AD-104W	M.G.RESISTOR	100k	1/16W
R829	NRSA6AD-104W	M.G.RESISTOR	100k	1/16W
R830	NRSA6AD-104W	M.G.RESISTOR	100k	1/16W
R831	NRSA6AD-104W	M.G.RESISTOR	100k	1/16W
R834	NRSA6AD-104W	M.G.RESISTOR	100k	1/16W
R840	NRSA6AD-102W	M.G.RESISTOR	1k	1/16W
R841	NRSA6AD-102W	M.G.RESISTOR	1k	1/16W
R842	NRSA6AD-103W	M.G.RESISTOR	10k	1/16W
R843	NRSA6AD-330W	M.G.RESISTOR	33	1/16W
R844	NRSA6AD-330W	M.G.RESISTOR	33	1/16W
R845	NRSA6AD-330W	M.G.RESISTOR	33	1/16W
R846	NRSA6AD-330W	M.G.RESISTOR	33	1/16W
R847	NRSA6AD-330W	M.G.RESISTOR	33	1/16W
R848	NRSA6AD-330W	M.G.RESISTOR	33	1/16W
R849	NRSA6AD-330W	M.G.RESISTOR	33	1/16W
R850	NRSA6AD-330W	M.G.RESISTOR	33	1/16W
R851	NRSA6AD-330W	M.G.RESISTOR	33	1/16W
R852	NRSA6AD-330W	M.G.RESISTOR	33	1/16W
R853	NRSA6AD-330W	M.G.RESISTOR	33	1/16W
R854	NRSA6AD-330W	M.G.RESISTOR	33	1/16W
R855	NRSA6AD-330W	M.G.RESISTOR	33	1/16W
R856	NRSA6AD-330W	M.G.RESISTOR	33	1/16W
R857	NRSA6AD-103W	M.G.RESISTOR	10k	1/16W
R858	NRSA6AJ-0R0W	M.G.RESISTOR	0	1/16W
R859	NRSA6AD-101W	M.G.RESISTOR	100	1/16W
R860	NRSA6AJ-0R0W	M.G.RESISTOR	0	1/16W
R861	NRSA6AJ-0R0W	M.G.RESISTOR	0	1/16W
R862	NRSA6AD-101W	M.G.RESISTOR	100	1/16W
R863	NRSA6AJ-0R0W	M.G.RESISTOR	0	1/16W
R867	NRSA6AJ-0R0W	M.G.RESISTOR	0	1/16W
R868	NRSA6AJ-0R0W	M.G.RESISTOR	0	1/16W
R869	NRSA6AJ-0R0W	M.G.RESISTOR	0	1/16W

Symbol No.	Part No.	Part Name	Description	
R870	NRSA6AD-472W	M.G.RESISTOR	4.7k	1/16W
R871	NRSA6AJ-0R0W	M.G.RESISTOR	0	1/16W
R872	NRSA6AD-103W	M.G.RESISTOR	10k	1/16W
R873	NRSA6AD-103W	M.G.RESISTOR	10k	1/16W
R874	NRSA6AD-103W	M.G.RESISTOR	10k	1/16W
R876	NRSA6AD-473W	M.G.RESISTOR	47k	1/16W
R878	NRSA6AJ-0R0W	M.G.RESISTOR	0	1/16W
R879	NRSA6AJ-0R0W	M.G.RESISTOR	0	1/16W
R880	NRSA6AJ-0R0W	M.G.RESISTOR	0	1/16W
R882	NRSA6AJ-0R0W	M.G.RESISTOR	0	1/16W
R883	NRSA6AJ-5R6W	M.G.RESISTOR	5.6	1/16W
R885	NRSA6AJ-0R0W	M.G.RESISTOR	0	1/16W
R887	NRSA6AJ-0R0W	M.G.RESISTOR	0	1/16W
R889	NRSA6AD-104W	M.G.RESISTOR	100k	1/16W
R890	NRSA6AJ-5R6W	M.G.RESISTOR	5.6	1/16W
R891	NRSA6AD-104W	M.G.RESISTOR	100k	1/16W
R892	NRSA6AD-104W	M.G.RESISTOR	100k	1/16W
R893	NRSA6AD-104W	M.G.RESISTOR	100k	1/16W
R894	NRSA6AD-104W	M.G.RESISTOR	100k	1/16W
R896	NRSA6AJ-0R0W	M.G.RESISTOR	0	1/16W
R912	NRSA6AD-101W	M.G.RESISTOR	100	1/16W
R913	NRSA6AD-101W	M.G.RESISTOR	100	1/16W
R914	NRSA6AD-101W	M.G.RESISTOR	100	1/16W
R915	NRSA6AD-101W	M.G.RESISTOR	100	1/16W
R920	NRSA6AJ-0R0W	M.G.RESISTOR	0	1/16W
R923	NRSA6AD-471W	M.G.RESISTOR	470	1/16W
R928	NRSA6AD-101W	M.G.RESISTOR	100	1/16W
R930	NRSA6AJ-0R0W	M.G.RESISTOR	0	1/16W
R931	NRSA6AJ-0R0W	M.G.RESISTOR	0	1/16W
R934	NRSA6AJ-0R0W	M.G.RESISTOR	0	1/16W
R935	NRSA6AJ-0R0W	M.G.RESISTOR	0	1/16W
R937	NRSA6AJ-0R0W	M.G.RESISTOR	0	1/16W
R938	NRSA6AJ-0R0W	M.G.RESISTOR	0	1/16W
R939	NRSA6AJ-0R0W	M.G.RESISTOR	0	1/16W
R940	NRSA6AJ-0R0W	M.G.RESISTOR	0	1/16W
R941	NRSA6AJ-0R0W	M.G.RESISTOR	0	1/16W
R943	NRSA6AJ-0R0W	M.G.RESISTOR	0	1/16W
R945	NRSA6AJ-0R0W	M.G.RESISTOR	0	1/16W
R946	NRSA6AJ-0R0W	M.G.RESISTOR	0	1/16W
R947	NRSA6AD-473W	M.G.RESISTOR	47k	1/16W
R1034	NRSA6AD-103W	M.G.RESISTOR	10k	1/16W
R1037	NRSA6AD-104W	M.G.RESISTOR	100k	1/16W
R1038	NRSA6AD-104W	M.G.RESISTOR	100k	1/16W
R1039	NRSA6AD-104W	M.G.RESISTOR	100k	1/16W
R1040	NRSA6AD-104W	M.G.RESISTOR	100k	1/16W
R1041	NRSA6AD-123W	M.G.RESISTOR	12k	1/16W
R1042	NRSA6AD-393W	M.G.RESISTOR	39k	1/16W
R1043	NRSA6AD-334W	M.G.RESISTOR	330k	1/16W
R1045	NRSA6AJ-0R0W	M.G.RESISTOR	0	1/16W
R1046	NRSA6AJ-0R0W	M.G.RESISTOR	0	1/16W
R1047	NRSA6AD-102W	M.G.RESISTOR	1k	1/16W
R1048	NRSA6AJ-0R0W	M.G.RESISTOR	0	1/16W
R1049	NRSA6AJ-0R0W	M.G.RESISTOR	0	1/16W
R1050	NRSA6AD-102W	M.G.RESISTOR	1k	1/16W
R1051	NRSA6AD-102W	M.G.RESISTOR	1k	1/16W
R1052	NRSA6AD-102W	M.G.RESISTOR	1k	1/16W
R1053	NRSA6AJ-3R9W	M.G.RESISTOR	3.9	1/16W
R1054	NRSA6AJ-3R9W	M.G.RESISTOR	3.9	1/16W
R1055	NRSA6AJ-3R9W	M.G.RESISTOR	3.9	1/16W
R1056	NRSA6AJ-3R9W	M.G.RESISTOR	3.9	1/16W
R1057	NRSA6AJ-3R9W	M.G.RESISTOR	3.9	1/16W
R1058	NRSA6AJ-3R9W	M.G.RESISTOR	3.9	1/16W
R1059	NRSA6AJ-3R9W	M.G.RESISTOR	3.9	1/16W
R1060	NRSA6AJ-3R9W	M.G.RESISTOR	3.9	1/16W
R1061	NRSA6AJ-3R9W	M.G.RESISTOR	3.9	1/16W
R1062	NRSA6AJ-3R9W	M.G.RESISTOR	3.9	1/16W
R1063	NRSA6AJ-3R9W	M.G.RESISTOR	3.9	1/16W
R1064	NRSA6AJ-3R9W	M.G.RESISTOR	3.9	1/16W
R1065	NRSA6AJ-3R9W	M.G.RESISTOR	3.9	1/16W
R1066	NRSA6AJ-3R9W	M.G.RESISTOR	3.9	1/16W
R1067	NRSA6AD-220W	M.G.RESISTOR	22	1/16W
R1070	NRSA6AD-512W	M.G.RESISTOR	5.1k	1/16W
R1071	NRSA6AD-103W	M.G.RESISTOR	10k	1/16W

Symbol No.	Part No.	Part Name	Description	
R1072	NRSA6AD-103W	M.G.RESISTOR	10k	1/16W
R1076	NRSA6AD-154W	M.G.RESISTOR	150k	1/16W
R1077	NRSA6AD-123W	M.G.RESISTOR	12k	1/16W
R1078	NRSA6AJ-0R0W	M.G.RESISTOR	0	1/16W
R1079	NRSA6AD-123W	M.G.RESISTOR	12k	1/16W
R1080	NRSA6AD-334W	M.G.RESISTOR	330k	1/16W
R1081	NRSA6AD-474W	M.G.RESISTOR	470k	1/16W
R1082	NRSA6AJ-0R0W	M.G.RESISTOR	0	1/16W
R1083	NRSA6AD-334W	M.G.RESISTOR	330k	1/16W
R1084	NRSA6AD-224W	M.G.RESISTOR	220k	1/16W
R1085	NRSA6AJ-0R0W	M.G.RESISTOR	0	1/16W
R1086	NRSA6AJ-0R0W	M.G.RESISTOR	0	1/16W
R1087	NRSA6AJ-0R0W	M.G.RESISTOR	0	1/16W
R1089	NRSA6AJ-0R0W	M.G.RESISTOR	0	1/16W
R1090	NRSA6AJ-0R0W	M.G.RESISTOR	0	1/16W
R1092	NRSA6AJ-0R0W	M.G.RESISTOR	0	1/16W
R1095	NRSA6AD-104W	M.G.RESISTOR	100k	1/16W
R1096	NRSA6AD-123W	M.G.RESISTOR	12k	1/16W
R1097	NRSA6AD-472W	M.G.RESISTOR	4.7k	1/16W
R1098	NRSA6AD-304W	M.G.RESISTOR	300k	1/16W
R1099	NRSA6AJ-0R0W	M.G.RESISTOR	0	1/16W
R1101	NRSA6AJ-0R0W	M.G.RESISTOR	0	1/16W
R1104	NRSA6AD-334W	M.G.RESISTOR	330k	1/16W
R1105	NRSA6AD-224W	M.G.RESISTOR	220k	1/16W
R1106	NRSA6AD-473W	M.G.RESISTOR	47k	1/16W
R1107	NRSA6AD-304W	M.G.RESISTOR	300k	1/16W
R1108	NRSA6AD-203W	M.G.RESISTOR	20k	1/16W
R1109	NRSA6AJ-0R0W	M.G.RESISTOR	0	1/16W
R1110	NRSA6AJ-225W	M.G.RESISTOR	2.2M	1/16W
R1111	NRSA6AJ-0R0W	M.G.RESISTOR	0	1/16W
R1116	NRSA6AD-103W	M.G.RESISTOR	10k	1/16W
R1117	NRSA6AD-622W	M.G.RESISTOR	6.2k	1/16W
R1118	NRSA6AJ-0R0W	M.G.RESISTOR	0	1/16W
R1119	NRSA6AJ-0R0W	M.G.RESISTOR	0	1/16W
R1120	NRSA6AJ-0R0W	M.G.RESISTOR	0	1/16W
R1121	NRSA6AD-473W	M.G.RESISTOR	47k	1/16W
R1122	NRSA6AD-272W	M.G.RESISTOR	2.7k	1/16W
R1126	NRSA6AD-103W	M.G.RESISTOR	10k	1/16W
R1127	NRSA6AD-103W	M.G.RESISTOR	10k	1/16W
R1128	NRSA6AD-220W	M.G.RESISTOR	22	1/16W
R1129	NRSA6AD-220W	M.G.RESISTOR	22	1/16W
R1130	NRSA6AD-220W	M.G.RESISTOR	22	1/16W
R1131	NRSA6AD-220W	M.G.RESISTOR	22	1/16W
R1132	NRSA6AD-220W	M.G.RESISTOR	22	1/16W
R1133	NRSA6AD-220W	M.G.RESISTOR	22	1/16W
R1134	NRSA6AD-220W	M.G.RESISTOR	22	1/16W
R1135	NRSA6AD-220W	M.G.RESISTOR	22	1/16W
R1136	NRSA6AJ-0R0W	M.G.RESISTOR	0	1/16W
R1137	NRSA6AJ-0R0W	M.G.RESISTOR	0	1/16W
R1138	NRSA6AJ-0R0W	M.G.RESISTOR	0	1/16W
R1139	NRSA6AJ-0R0W	M.G.RESISTOR	0	1/16W
R1140	NRSA6AJ-0R0W	M.G.RESISTOR	0	1/16W
R1141	NRSA6AJ-0R0W	M.G.RESISTOR	0	1/16W
R1142	NRSA6AJ-0R0W	M.G.RESISTOR	0	1/16W
R1143	NRSA6AJ-0R0W	M.G.RESISTOR	0	1/16W
R1144	NRSA6AJ-0R0W	M.G.RESISTOR	0	1/16W
R1145	NRSA6AJ-0R0W	M.G.RESISTOR	0	1/16W
R1146	NRSA6AJ-0R0W	M.G.RESISTOR	0	1/16W
R2100	NRSA6AD-392W	M.G.RESISTOR	3.9k	1/16W
R2101	NRSA6AD-332W	M.G.RESISTOR	3.3k	1/16W
RA61	NRZ0015-101X	RESISTOR ARRAY	100	
RA62	NRZ0015-101X	RESISTOR ARRAY	100	
RA65	NRZ0015-102X	RESISTOR ARRAY	1k	
RA68	NRZ0015-103X	RESISTOR ARRAY	10k	
RA69	NRZ0015-103X	RESISTOR ARRAY	10k	
RA79	NRZ0015-473X	RESISTOR ARRAY	47k	
RA80	NRZ0015-473X	RESISTOR ARRAY	47k	
C1	NCB11AK-106X	CER.CAPACITOR	10	10V
C3	NCB11AK-106X	CER.CAPACITOR	10	10V
C4	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
C5	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C6	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C7	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C8	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C9	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C10	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C11	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C12	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C13	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C14	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C15	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C16	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C17	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C18	NDCA1HJ-471W	CER.CAPACITOR	470p	50V
C19	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C20	NDCA1HJ-470W	CER.CAPACITOR	47p	50V
C21	NCB11AK-106X	CER.CAPACITOR	10	10V
C22	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C23	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C24	NCB11AK-106X	CER.CAPACITOR	10	10V
C27	NCB11AK-106X	CER.CAPACITOR	10	10V
C28	NCBA1CK-103W	CER.CAPACITOR	0.01	16V
C29	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C30	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C31	NCBA1CK-103W	CER.CAPACITOR	0.01	16V
C32	NCB11AK-106X	CER.CAPACITOR	10	10V
C33	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C34	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C35	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C36	NCBA1CK-103W	CER.CAPACITOR	0.01	16V
C39	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C40	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C47	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C48	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C49	NCBA1CK-103W	CER.CAPACITOR	0.01	16V
C50	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C51	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C52	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C57	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C59	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C60	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C61	NCBA1CK-103W	CER.CAPACITOR	0.01	16V
C62	NCBA1CK-103W	CER.CAPACITOR	0.01	16V
C63	NCBA1CK-103W	CER.CAPACITOR	0.01	16V
C64	NCB11AK-106X	CER.CAPACITOR	10	10V
C65	NCBA1CK-103W	CER.CAPACITOR	0.01	16V
C66	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C67	NDC31HJ-5R0X	CER.CAPACITOR	5p	50V
C68	NDC31HJ-5R0X	CER.CAPACITOR	5p	50V
C69	NDC31HJ-5R0X	CER.CAPACITOR	5p	50V
C70	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C71	NDCA1HJ-330W	CER.CAPACITOR	33p	50V
C72	NDCA1HJ-330W	CER.CAPACITOR	33p	50V
C73	NDCA1HJ-330W	CER.CAPACITOR	33p	50V
C75	NDCA1HJ-560W	CER.CAPACITOR	56p	50V
C76	NDCA1HJ-560W	CER.CAPACITOR	56p	50V
C77	NDCA1HJ-560W	CER.CAPACITOR	56p	50V
C78	NDCA1HJ-470W	CER.CAPACITOR	47p	50V
C79	NDCA1HJ-470W	CER.CAPACITOR	47p	50V
C80	NDCA1HJ-470W	CER.CAPACITOR	47p	50V
C83	NDCA1EJ-270W	CER.CAPACITOR	27p	25V
C84	NDCA1EJ-270W	CER.CAPACITOR	27p	25V
C85	NDCA1EJ-270W	CER.CAPACITOR	27p	25V
C86	NDCA1EJ-271W	CER.CAPACITOR	270p	25V
C87	NDCA1EJ-271W	CER.CAPACITOR	270p	25V
C88	NDCA1EJ-271W	CER.CAPACITOR	270p	25V
C89	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C90	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C91	NCB11AK-106X	CER.CAPACITOR	10	10V
C92	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C93	NCB11AK-106X	CER.CAPACITOR	10	10V
C94	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C107	NDCA1HJ-471W	CER.CAPACITOR	470p	50V

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Symbol No.	Part No.	Part Name	Description	
C108	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C109	NDCA1HJ-470W	CER.CAPACITOR	47p	50V
C110	NCB11AK-106X	CER.CAPACITOR	10	10V
C111	NCB11AK-106X	CER.CAPACITOR	10	10V
C113	NCB11AK-106X	CER.CAPACITOR	10	10V
C114	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C115	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C116	NCB11AK-106X	CER.CAPACITOR	10	10V
C117	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C118	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C120	NDCA1HJ-3R0W	CER.CAPACITOR	3p	50V
C121	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C122	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C124	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C126	NDCA1HJ-3R0W	CER.CAPACITOR	3p	50V
C128	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C131	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C132	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C135	NCB11AK-106X	CER.CAPACITOR	10	10V
C136	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C137	NCB11AK-106X	CER.CAPACITOR	10	10V
C138	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C139	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C146	NCB11AK-106X	CER.CAPACITOR	10	10V
C147	NCB11AK-106X	CER.CAPACITOR	10	10V
C148	NCB11AK-106X	CER.CAPACITOR	10	10V
C149	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C150	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C151	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C152	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C153	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C154	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C155	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C156	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C157	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C158	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C159	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C160	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C161	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C162	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C163	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C164	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C165	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C166	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C167	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C168	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C169	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C170	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C171	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C172	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C173	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C174	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C175	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C176	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C177	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C178	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C182	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C183	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C184	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C185	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C186	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C187	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C188	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C189	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C190	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C191	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C192	NCB11CK-475X	CER.CAPACITOR	4.7	16V
C193	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C194	NCB11CK-475X	CER.CAPACITOR	4.7	16V
C195	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C196	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C197	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C198	NCBA1AK-104W	CER.CAPACITOR	0.1	10V

Symbol No.	Part No.	Part Name	Description	
C199	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C200	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C201	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C202	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C203	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C204	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C205	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C206	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C207	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C208	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C209	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C210	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C217	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C218	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C219	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C220	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C221	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C222	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C223	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C224	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C225	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C226	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C227	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C228	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C229	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C230	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C231	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C233	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C234	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C235	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C236	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C237	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C238	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C239	NCBA1CK-103W	CER.CAPACITOR	0.01	16V
C240	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C241	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C242	NCBA1CK-103W	CER.CAPACITOR	0.01	16V
C243	NCBA1CK-103W	CER.CAPACITOR	0.01	16V
C244	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C246	NCBA1CK-103W	CER.CAPACITOR	0.01	16V
C247	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C248	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C249	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C250	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C251	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C252	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C253	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C254	NCBA1CK-103W	CER.CAPACITOR	0.01	16V
C255	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C256	NCBA1CK-103W	CER.CAPACITOR	0.01	16V
C258	NCBA1CK-103W	CER.CAPACITOR	0.01	16V
C305	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C306	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C307	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C308	NCBA1CK-103W	CER.CAPACITOR	0.01	16V
C309	NDCA1HJ-150W	CER.CAPACITOR	15p	50V
C310	NDCA1HJ-150W	CER.CAPACITOR	15p	50V
C311	NCBA1CK-223W	CER.CAPACITOR	0.022	16V
C312	NCBA1CK-223W	CER.CAPACITOR	0.022	16V
C313	NCB11AK-106X	CER.CAPACITOR	10	10V
C314	NCBA1CK-103W	CER.CAPACITOR	0.01	16V
C315	NCBA1HK-102W	CER.CAPACITOR	1000p	50V
C316	NCBA1CK-223W	CER.CAPACITOR	0.022	16V
C317	NCBA1CK-223W	CER.CAPACITOR	0.022	16V
C318	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C319	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C320	NCBA1CK-103W	CER.CAPACITOR	0.01	16V
C321	NCB30JK-105X	CER.CAPACITOR	1	6.3V
C323	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C324	NCB30JK-105X	CER.CAPACITOR	1	6.3V
C325	NCB11AK-106X	CER.CAPACITOR	10	10V
C326	NCB11AK-106X	CER.CAPACITOR	10	10V

Symbol No.	Part No.	Part Name	Description	
C327	NCBA1CK-103W	CER.CAPACITOR	0.01	16V
C328	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C329	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C330	NCB11AK-106X	CER.CAPACITOR	10	10V
C331	NCBA1CK-103W	CER.CAPACITOR	0.01	16V
C332	NCBA1CK-103W	CER.CAPACITOR	0.01	16V
C333	NCB11AK-106X	CER.CAPACITOR	10	10V
C334	NCBA1HK-102W	CER.CAPACITOR	1000p	50V
C335	NCBA1CK-103W	CER.CAPACITOR	0.01	16V
C336	NCBA1HK-102W	CER.CAPACITOR	1000p	50V
C337	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C338	NDCA1HJ-151W	CER.CAPACITOR	150p	50V
C339	NCB30JK-225X	CER.CAPACITOR	2.2	6.3V
C340	NCB30JK-105X	CER.CAPACITOR	1	6.3V
C341	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C342	NCBA1AK-473W	CER.CAPACITOR	0.047	10V
C343	NCB30JK-225X	CER.CAPACITOR	2.2	6.3V
C344	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C345	NCB11AK-106X	CER.CAPACITOR	10	10V
C346	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C347	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C348	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C349	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C350	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C351	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C352	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C353	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C354	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C355	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C356	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C357	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C358	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C359	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C360	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C361	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C363	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C365	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C366	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C367	NDCA1HJ-390W	CER.CAPACITOR	39p	50V
C368	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C369	NDCA1HJ-102W	CER.CAPACITOR	1000p	50V
C370	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C371	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C372	NCB30JK-105X	CER.CAPACITOR	1	6.3V
C373	NCB11CK-475X	CER.CAPACITOR	4.7	16V
C374	NCBA1CK-103W	CER.CAPACITOR	0.01	16V
C375	NDCA1EJ-271W	CER.CAPACITOR	270p	25V
C376	NDCA1HJ-6R0W	CER.CAPACITOR	6p	50V
C377	NDCA1HJ-6R0W	CER.CAPACITOR	6p	50V
C378	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C379	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C380	NCBA1HK-222W	CER.CAPACITOR	2200p	50V
C381	NCBA1AK-473W	CER.CAPACITOR	0.047	10V
C383	NCBA1HK-102W	CER.CAPACITOR	1000p	50V
C384	NDCA1HJ-390W	CER.CAPACITOR	39p	50V
C385	NCBA1HK-102W	CER.CAPACITOR	1000p	50V
C386	NDCA1HJ-470W	CER.CAPACITOR	47p	50V
C388	NCBA1CK-103W	CER.CAPACITOR	0.01	16V
C389	NCBA1CK-103W	CER.CAPACITOR	0.01	16V
C395	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C396	NCBA1CK-103W	CER.CAPACITOR	0.01	16V
C397	NCB30JK-105X	CER.CAPACITOR	1	6.3V
C398	NCBA1CK-103W	CER.CAPACITOR	0.01	16V
C399	NCBA1CK-103W	CER.CAPACITOR	0.01	16V
C400	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C401	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C402	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C403	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C404	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C405	NCBA1CK-103W	CER.CAPACITOR	0.01	16V
C406	NCBA1CK-103W	CER.CAPACITOR	0.01	16V
C407	NDCA1HJ-101W	CER.CAPACITOR	100p	50V
C408	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C409	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C414	NCB30JK-105X	CER.CAPACITOR	1	6.3V
C416	NCB11AK-106X	CER.CAPACITOR	10	10V
C418	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C419	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C421	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C422	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C423	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C428	NCBA1CK-103W	CER.CAPACITOR	0.01	16V
C429	NCBA1CK-103W	CER.CAPACITOR	0.01	16V
C430	NCBA1CK-103W	CER.CAPACITOR	0.01	16V
C431	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C432	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C433	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C434	NCB30JK-105X	CER.CAPACITOR	1	6.3V
C435	NDCA1EJ-271W	CER.CAPACITOR	270p	25V
C437	NCBA1CK-103W	CER.CAPACITOR	0.01	16V
C438	NCBA1CK-103W	CER.CAPACITOR	0.01	16V
C439	NCBA1CK-103W	CER.CAPACITOR	0.01	16V
C440	NCB30JK-105X	CER.CAPACITOR	1	6.3V
C441	NCBA1CK-103W	CER.CAPACITOR	0.01	16V
C442	NCBA1CK-103W	CER.CAPACITOR	0.01	16V
C443	NCBA1CK-103W	CER.CAPACITOR	0.01	16V
C444	NCBA1CK-103W	CER.CAPACITOR	0.01	16V
C445	NCB11AK-106X	CER.CAPACITOR	10	10V
C446	NCBA1HK-102W	CER.CAPACITOR	1000p	50V
C447	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C448	NCBA1CK-103W	CER.CAPACITOR	0.01	16V
C449	NCBA1CK-103W	CER.CAPACITOR	0.01	16V
C450	NCBA1CK-103W	CER.CAPACITOR	0.01	16V
C451	NCBA1CK-103W	CER.CAPACITOR	0.01	16V
C452	NCBA1CK-103W	CER.CAPACITOR	0.01	16V
C453	NCBA1CK-103W	CER.CAPACITOR	0.01	16V
C454	NCBA1CK-103W	CER.CAPACITOR	0.01	16V
C455	NCBA1CK-103W	CER.CAPACITOR	0.01	16V
C457	NCBA1CK-103W	CER.CAPACITOR	0.01	16V
C461	NCB30JK-105X	CER.CAPACITOR	1	6.3V
C462	NCBA1CK-103W	CER.CAPACITOR	0.01	16V
C463	NCBA1CK-103W	CER.CAPACITOR	0.01	16V
C469	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C472	NCBA1CK-103W	CER.CAPACITOR	0.01	16V
C473	NCBA1HK-102W	CER.CAPACITOR	1000p	50V
C476	NCB30JK-105X	CER.CAPACITOR	1	6.3V
C477	NCBA1CK-103W	CER.CAPACITOR	0.01	16V
C486	NCBA1HK-102W	CER.CAPACITOR	1000p	50V
C488	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C490	NCB30JK-105X	CER.CAPACITOR	1	6.3V
C491	NCBA1CK-103W	CER.CAPACITOR	0.01	16V
C542	NCB11EK-105X	CER.CAPACITOR	1	25V
C543	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C544	NCB11EK-105X	CER.CAPACITOR	1	25V
C545	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C546	NCB11EK-105X	CER.CAPACITOR	1	25V
C547	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C548	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C549	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C550	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C551	NCBA1EK-682W	CER.CAPACITOR	6800p	25V
C552	NCBA1EK-682W	CER.CAPACITOR	6800p	25V
C553	NCBA1EK-682W	CER.CAPACITOR	6800p	25V
C554	NCJ11EK-106X-R	CER.CAPACITOR	10	25V
C555	NCB11AK-106X	CER.CAPACITOR	10	10V
C556	NCB11AK-106X	CER.CAPACITOR	10	10V
C557	NDCA1HJ-471W	CER.CAPACITOR	470p	50V
C558	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C559	NDCA1HJ-470W	CER.CAPACITOR	47p	50V
C560	NCB11AK-106X	CER.CAPACITOR	10	10V
C561	NCB11AK-106X	CER.CAPACITOR	10	10V
C565	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C566	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C567	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C568	NCBA1AK-104W	CER.CAPACITOR	0.1	10V
C569	NCBA1AK-104W	CER.CAPACITOR	0.1	10V

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Symbol No.	Part No.	Part Name	Description
C570	NCBA1AK-104W	CER.CAPACITOR	0.1 10V
C571	NCBA1AK-104W	CER.CAPACITOR	0.1 10V
C572	NCBA1AK-104W	CER.CAPACITOR	0.1 10V
C573	NCBA1AK-104W	CER.CAPACITOR	0.1 10V
C574	NCBA1AK-104W	CER.CAPACITOR	0.1 10V
C575	NCBA1AK-104W	CER.CAPACITOR	0.1 10V
C576	NCBA1AK-104W	CER.CAPACITOR	0.1 10V
C577	NCBA1AK-104W	CER.CAPACITOR	0.1 10V
C578	NCBA1AK-104W	CER.CAPACITOR	0.1 10V
C579	NCBA1AK-104W	CER.CAPACITOR	0.1 10V
C580	NCBA1AK-104W	CER.CAPACITOR	0.1 10V
C581	NCBA1AK-104W	CER.CAPACITOR	0.1 10V
C582	NCBA1AK-104W	CER.CAPACITOR	0.1 10V
C583	NCBA1AK-104W	CER.CAPACITOR	0.1 10V
C584	NCBA1AK-104W	CER.CAPACITOR	0.1 10V
C585	NCBA1AK-104W	CER.CAPACITOR	0.1 10V
C586	NCBA1AK-104W	CER.CAPACITOR	0.1 10V
C587	NCBA1AK-104W	CER.CAPACITOR	0.1 10V
C588	NCBA1AK-104W	CER.CAPACITOR	0.1 10V
C589	NCBA1AK-104W	CER.CAPACITOR	0.1 10V
C590	NCBA1AK-104W	CER.CAPACITOR	0.1 10V
C591	NCBA1AK-104W	CER.CAPACITOR	0.1 10V
C592	NCBA1AK-104W	CER.CAPACITOR	0.1 10V
C593	NCBA1AK-104W	CER.CAPACITOR	0.1 10V
C594	NCBA1AK-104W	CER.CAPACITOR	0.1 10V
C595	NCBA1AK-104W	CER.CAPACITOR	0.1 10V
C596	NCBA1AK-104W	CER.CAPACITOR	0.1 10V
C597	NCBA1AK-104W	CER.CAPACITOR	0.1 10V
C598	NCB31AK-224X	CER.CAPACITOR	0.22 10V
C605	NDCA1HJ-471W	CER.CAPACITOR	470p 50V
C606	NDCA1HJ-471W	CER.CAPACITOR	470p 50V
C607	NCBA1AK-104W	CER.CAPACITOR	0.1 10V
C608	NCBA1HK-102W	CER.CAPACITOR	1000p 50V
C609	NDCA1HJ-470W	CER.CAPACITOR	47p 50V
C610	NCB11AK-106X	CER.CAPACITOR	10 10V
C612	NBS40JM-686X	TAN.CAPACITOR	68 6.3V
C613	NCB11AK-106X	CER.CAPACITOR	10 10V
C614	NCB11AK-106X	CER.CAPACITOR	10 10V
C617	NDCA1HJ-471W	CER.CAPACITOR	470p 50V
C618	NCBA1AK-104W	CER.CAPACITOR	0.1 10V
C620	NDCA1HJ-470W	CER.CAPACITOR	47p 50V
C621	NCB11AK-106X	CER.CAPACITOR	10 10V
C622	NCB11AK-106X	CER.CAPACITOR	10 10V
C624	NDCA1HJ-100W	CER.CAPACITOR	10p 50V
C625	NDCA1HJ-100W	CER.CAPACITOR	10p 50V
C626	NDCA1HJ-471W	CER.CAPACITOR	470p 50V
C627	NCBA1HK-102W	CER.CAPACITOR	1000p 50V
C628	NCB11AK-106X	CER.CAPACITOR	10 10V
C629	NBJM0JM-157X	TAN.CAPACITOR	150 6.3V
C630	NBSH0JM-337X	TAN.CAPACITOR	330 6.3V
C632	NCBA1AK-104W	CER.CAPACITOR	0.1 10V
C633	NCB30JK-105X	CER.CAPACITOR	1 6.3V
C634	NCBA1CK-103W	CER.CAPACITOR	0.01 16V
C635	NCB30JK-105X	CER.CAPACITOR	1 6.3V
C2000	NCBA1CK-103W	CER.CAPACITOR	0.01 16V
L1	NQL89EN-6R8X	COIL	6.8uH
L3	NQL904J-1R0X	COIL	1uH
L4	NQL904J-1R0X	COIL	1uH
L5	NQL904J-1R0X	COIL	1uH
L6	NQL904J-1R0X	COIL	1uH
L7	NQL904J-1R0X	COIL	1uH
L8	NQL904J-1R0X	COIL	1uH
L9	NQL904J-1R0X	COIL	1uH
L10	NQL904J-1R0X	COIL	1uH
L11	NQL904J-1R0X	COIL	1uH
L15	NQL89EN-6R8X	COIL	6.8uH
L27	NQL044K-100X	COIL	10uH
L28	NQL904J-2R2X	COIL	2.2uH
L29	NQR0276-002X	COIL	0mH
L30	NQL904J-120X	COIL	12uH
L31	NQL904J-100X	COIL	10uH

Symbol No.	Part No.	Part Name	Description
L33	NQR0276-002X	COIL	0mH
L35	NQL085J-2R2X	COIL	2.2uH
L36	NQL085J-2R2X	COIL	2.2uH
L40	NQL89EN-6R8X	COIL	6.8uH
L42	NQL89EN-2R4X	COIL	2.4uH
L43	NQL89EN-6R8X	COIL	6.8uH
L44	NQL89EN-6R8X	COIL	6.8uH
L45	NQLC2EM-3R3X	COIL	3.3uH
L46	NQL044K-100X	COIL	10uH
L47	NQL044K-100X	COIL	10uH
X1	NAX0608-001X	CRYSTAL	13.5MHz
X2	NAX0723-001X	CRYSTAL	8.5MHz
X6	NAX0348-001X	CRYSTAL	27MHz
X8	NAX0206-001X	CRYSTAL	24.567MHz
X9	NAX0485-001X	CRYSTAL	27.000MHz
CN3	QGA1002F1-12X	CONNECTOR	12PIN
CN16	QGF0508F2-50X	CONNECTOR	50PIN
CN17	QGF0508F2-16X	CONNECTOR	16PIN
CN18	QGF0508F1-10X	CONNECTOR	10PIN
CN19	QGA1002C1-13X	CONNECTOR	13PIN
CN26	QGB0801K1-54X	CONNECTOR	54PIN
CN27	QGB0801M2-54X	CONNECTOR	54PIN
CN28	QGB0801M2-54X	CONNECTOR	54PIN
CN29	QGA1201C2-11X	CONNECTOR	11PIN
CN30	QGF0534F1-20X	CONNECTOR	20PIN
CN49	QGB0805L4-E0	CONNECTOR	140PIN
CN50	NNZ0138-001X	CONNECTOR	
CN52	NNZ0133-001X	CONNECTOR	
CN53	NNZ0133-001X	CONNECTOR	
CN54	NNZ0138-001X	CONNECTOR	
K1	NQR0200-005X	FERRITE BEADS	
K2	NQR0200-005X	FERRITE BEADS	
K6	NQR0265-001X	FERRITE BEADS	
K21	NQR0265-001X	FERRITE BEADS	
K23	NQR0413-002X	FERRITE BEADS	
K24	NQR0413-002X	FERRITE BEADS	
K25	NQR0200-005X	FERRITE BEADS	
K26	NQR0200-005X	FERRITE BEADS	
K27	NQR0200-005X	FERRITE BEADS	
K28	NQR0200-005X	FERRITE BEADS	
K29	NQR0200-005X	FERRITE BEADS	
K30	NQR0200-005X	FERRITE BEADS	
K31	NQR0200-005X	FERRITE BEADS	
K32	NQR0200-005X	FERRITE BEADS	
K33	NQR0200-005X	FERRITE BEADS	
K34	NQR0200-004X	FERRITE BEADS	
K35	NQR0200-004X	FERRITE BEADS	
K36	NQR0200-004X	FERRITE BEADS	
K37	NQR0200-004X	FERRITE BEADS	
K38	NQR0200-004X	FERRITE BEADS	
K39	NQR0200-005X	FERRITE BEADS	
K40	NQR0200-005X	FERRITE BEADS	
K41	NQR0200-005X	FERRITE BEADS	
K42	NQR0200-004X	FERRITE BEADS	
K45	NQR0200-005X	FERRITE BEADS	
K46	NQR0200-005X	FERRITE BEADS	
K47	NQR0200-005X	FERRITE BEADS	
K48	NQR0200-005X	FERRITE BEADS	
K49	NQR0200-005X	FERRITE BEADS	
K50	NQR0200-005X	FERRITE BEADS	
K51	NQR0200-005X	FERRITE BEADS	
K52	NQR0200-005X	FERRITE BEADS	
K53	NQR0200-005X	FERRITE BEADS	
K54	NQR0200-005X	FERRITE BEADS	
K55	NQR0200-005X	FERRITE BEADS	
K56	NQR0200-005X	FERRITE BEADS	
K57	NQR0448-001X	FERRITE BEADS	
K59	NQR0265-001X	FERRITE BEADS	
K60	NQR0265-001X	FERRITE BEADS	

6.5 MIF BOARD ASSEMBLY PARTS LIST 2 0

CK2801A0B1 (GY-HD100U)

CK2801B0B1 (GY-HD100E)

2 0 ☐☐☐☐☐☐☐

Symbol No.	Part No.	Part Name	Description		
IC58	PLSC1590	I.C.(M)	HD64F2368VTE34V		
IC59	TC7W34FU-X	I.C.(M)	TOSHIBA		
IC60	TC7W74FU-X	I.C.(M)	TOSHIBA		
IC61	M95320-WMN6P-X	I.C.(M)	MITSUBISHI		
IC62	MM1573AN-X	I.C.(M)	MITSUMI		
IC63	RS5C314-X	I.C.(M)	RICOH		
IC64	R3112N261A-X	I.C.(M)	RICOH		
IC65	LC4064V75T100C1	I.C.(M)	LATTICE		
IC66	LC4128V75T100C2	I.C.(M)	LATTICE		
IC67	SN74AHC1G14DC-X	I.C.(M)	TEXAS		
IC68	SN74AHC1G14DC-X	I.C.(M)	TEXAS		
IC96	XC2C2567VQG100C	I.C.(M)	XILINX		
IC97	S29AL016D70TFI1	I.C.(M)	SPANSION		
IC98	TC7W34FU-X	I.C.(M)	TOSHIBA		
IC99	CXM3004R	I.C.(M)	SONY		
IC100	AK5357VT-X	I.C.(M)	ASAHI KASEI		
IC101	AK4384VT-X	I.C.(M)	ASAHI KASEI		
IC109	NJM78L12UA-X	I.C.(M)	JRC		
Q1	DTC124EUA-X	TRANSISTOR	ROHM		
Q2	DTC124EUA-X	TRANSISTOR	ROHM		
Q11	DTA124EUA-X	TRANSISTOR	ROHM		
Q12	DTC124EUA-X	TRANSISTOR	ROHM		
Q13	DTA124EUA-X	TRANSISTOR	ROHM		
Q14	SSM3K15FS-X	TRANSISTOR	TOSHIBA		
Q16	DTC124EUA-X	TRANSISTOR	ROHM		
Q17	DTC124EUA-X	TRANSISTOR	ROHM		
Q20	DTC124EUA-X	TRANSISTOR	ROHM		
Q21	2SC4626J/BC/-X	TRANSISTOR	MATSUSHITA		
Q22	DTA124EUA-X	TRANSISTOR	ROHM		
Q24	DTC124EUA-X	TRANSISTOR	ROHM		
Q29	DTC124EUA-X	TRANSISTOR	ROHM		
Q30	DTC124EUA-X	TRANSISTOR	ROHM		
Q31	2SA1790J/BC/-X	TRANSISTOR	MATSUSHITA		
Q32	DTC124EUA-X	TRANSISTOR	ROHM		
Q33	2SC4626J/BC/-X	TRANSISTOR	MATSUSHITA		
Q34	2SA1790J/BC/-X	TRANSISTOR	MATSUSHITA		
Q35	2SC4626J/BC/-X	TRANSISTOR	MATSUSHITA		
Q36	2SA1790J/BC/-X	TRANSISTOR	MATSUSHITA		
Q37	DTC124EUA-X	TRANSISTOR	ROHM		
Q500	DTC124EUA-X	TRANSISTOR	ROHM		
Q913	DTA124EUA-X	TRANSISTOR	ROHM		
Q914	DTA124EUA-X	TRANSISTOR	ROHM		
D1	SML-020MVT-W	L.E.D.	ROHM		
D18	HZM3.9NB2-X	ZENER DIODE	HITACHI		
D19	MA741WK-X	DIODE	MATSUSHITA		
D20	MA741WK-X	DIODE	MATSUSHITA		
D36	SML-020MVT-W	L.E.D.	ROHM		
D46	HZM3.0NB1-X	ZENER DIODE	HITACHI		
D47	HZM3.9NB2-X	ZENER DIODE	HITACHI		
R4	NRSA63J-101X	M.G.RESISTOR	100	1/16W	
R5	NRSA63J-101X	M.G.RESISTOR	100	1/16W	
R6	NRSA63J-101X	M.G.RESISTOR	100	1/16W	
R7	NRSA63J-101X	M.G.RESISTOR	100	1/16W	
R8	NRSA63J-101X	M.G.RESISTOR	100	1/16W	
R369	NRSA63J-0R0X	M.G.RESISTOR	0	1/16W	
R370	NRSA63J-0R0X	M.G.RESISTOR	0	1/16W	
R371	NRSA63J-0R0X	M.G.RESISTOR	0	1/16W	
R372	NRSA63J-0R0X	M.G.RESISTOR	0	1/16W	
R373	NRSA63J-0R0X	M.G.RESISTOR	0	1/16W	
R375	NRSA63J-104X	M.G.RESISTOR	100k	1/16W	
R377	NRSA63J-473X	M.G.RESISTOR	47k	1/16W	
R378	NRSA63J-103X	M.G.RESISTOR	10k	1/16W	
R379	NRSA63J-473X	M.G.RESISTOR	47k	1/16W	
R381	NRSA63J-473X	M.G.RESISTOR	47k	1/16W	
R382	NRSA63J-683X	M.G.RESISTOR	68k	1/16W	
R383	NRSA63J-223X	M.G.RESISTOR	22k	1/16W	
R384	NRSA63J-473X	M.G.RESISTOR	47k	1/16W	
R385	NRSA63J-223X	M.G.RESISTOR	22k	1/16W	
R387	NRSA63J-0R0X	M.G.RESISTOR	0	1/16W	

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Symbol No.	Part No.	Part Name	Description		
R388	NRSA63J-473X	M.G.RESISTOR	47k	1/16W	
R389	NRSA63J-102X	M.G.RESISTOR	1k	1/16W	
R390	NRSA63J-0R0X	M.G.RESISTOR	0	1/16W	
R392	NRSA63J-0R0X	M.G.RESISTOR	0	1/16W	
R393	NRSA63J-101X	M.G.RESISTOR	100	1/16W	
R395	NRSA63J-473X	M.G.RESISTOR	47k	1/16W	
R396	NRSA63J-473X	M.G.RESISTOR	47k	1/16W	
R397	NRSA63J-473X	M.G.RESISTOR	47k	1/16W	
R399	NRSA63J-473X	M.G.RESISTOR	47k	1/16W	
R400	NRSA63J-473X	M.G.RESISTOR	47k	1/16W	
R401	NRSA63J-102X	M.G.RESISTOR	1k	1/16W	
R402	NRSA63J-333X	M.G.RESISTOR	33k	1/16W	
R403	NRSA63J-683X	M.G.RESISTOR	68k	1/16W	
R404	NRSA63J-752X	M.G.RESISTOR	7.5k	1/16W	
R405	NRSA63J-123X	M.G.RESISTOR	12k	1/16W	
R406	NRSA63J-473X	M.G.RESISTOR	47k	1/16W	
R408	NRSA63J-473X	M.G.RESISTOR	47k	1/16W	
R409	NRSA63J-473X	M.G.RESISTOR	47k	1/16W	
R411	NRSA63J-472X	M.G.RESISTOR	4.7k	1/16W	
R413	NRSA63J-223X	M.G.RESISTOR	22k	1/16W	
R414	NRSA63J-473X	M.G.RESISTOR	47k	1/16W	
R415	NRSA63J-105X	M.G.RESISTOR	1M	1/16W	
R416	NRSA63J-0R0X	M.G.RESISTOR	0	1/16W	
R417	NRSA63J-0R0X	M.G.RESISTOR	0	1/16W	
R418	NRSA63J-473X	M.G.RESISTOR	47k	1/16W	
R419	NRSA63J-473X	M.G.RESISTOR	47k	1/16W	
R420	NRSA63J-473X	M.G.RESISTOR	47k	1/16W	
R421	NRSA63J-473X	M.G.RESISTOR	47k	1/16W	
R422	NRSA63J-473X	M.G.RESISTOR	47k	1/16W	
R423	NRSA63J-0R0X	M.G.RESISTOR	0	1/16W	
R424	NRSA63J-473X	M.G.RESISTOR	47k	1/16W	
R425	NRSA63J-473X	M.G.RESISTOR	47k	1/16W	
R426	NRSA63J-473X	M.G.RESISTOR	47k	1/16W	
R427	NRSA63J-473X	M.G.RESISTOR	47k	1/16W	
R428	NRSA63J-473X	M.G.RESISTOR	47k	1/16W	
R430	NRSA63J-103X	M.G.RESISTOR	10k	1/16W	
R431	NRSA63J-0R0X	M.G.RESISTOR	0	1/16W	
R432	NRSA63J-0R0X	M.G.RESISTOR	0	1/16W	
R433	NRSA63J-473X	M.G.RESISTOR	47k	1/16W	
R434	NRSA63J-471X	M.G.RESISTOR	470	1/16W	
R435	NRSA63J-473X	M.G.RESISTOR	47k	1/16W	
R436	NRSA63J-471X	M.G.RESISTOR	470	1/16W	
R437	NRSA63J-473X	M.G.RESISTOR	47k	1/16W	
R438	NRSA63J-0R0X	M.G.RESISTOR	0	1/16W	
R439	NRSA63J-473X	M.G.RESISTOR	47k	1/16W	
R440	NRSA63J-473X	M.G.RESISTOR	47k	1/16W	
R441	NRSA63J-473X	M.G.RESISTOR	47k	1/16W	
R442	NRSA63J-473X	M.G.RESISTOR	47k	1/16W	
R443	NRSA63J-473X	M.G.RESISTOR	47k	1/16W	
R444	NRSA63J-473X	M.G.RESISTOR	47k	1/16W	
R445	NRSA63J-473X	M.G.RESISTOR	47k	1/16W	
R446	NRSA63J-0R0X	M.G.RESISTOR	0	1/16W	
R448	NRSA63J-473X	M.G.RESISTOR	47k	1/16W	(E)
R449	NRSA63J-0R0X	M.G.RESISTOR	0	1/16W	(U)
R450	NRSA63J-473X	M.G.RESISTOR	47k	1/16W	
R452	NRSA63J-473X	M.G.RESISTOR	47k	1/16W	(U)
R453	NRSA63J-0R0X	M.G.RESISTOR	0	1/16W	(E)
R456	NRSA63J-224X	M.G.RESISTOR	220k	1/16W	
R457	NRSA63J-473X	M.G.RESISTOR	47k	1/16W	
R458	NRSA63J-224X	M.G.RESISTOR	220k	1/16W	
R460	NRSA63J-473X	M.G.RESISTOR	47k	1/16W	
R462	NRSA63J-103X	M.G.RESISTOR	10k	1/16W	
R464	NRSA63J-101X	M.G.RESISTOR	100	1/16W	
R465	NRSA63J-473X	M.G.RESISTOR	47k	1/16W	
R466	NRSA63J-101X	M.G.RESISTOR	100	1/16W	
R469	NRSA63J-473X	M.G.RESISTOR	47k	1/16W	
R470	NRSA63J-103X	M.G.RESISTOR	10k	1/16W	
R471	NRSA63J-473X	M.G.RESISTOR	47k	1/16W	
R472	NRSA63J-473X	M.G.RESISTOR	47k	1/16W	
R473	NRSA63J-473X	M.G.RESISTOR	47k	1/16W	
R474	NRSA63J-101X	M.G.RESISTOR	100	1/16W	
R475	NRSA63J-101X	M.G.RESISTOR	100	1/16W	
R476	NRSA63J-473X	M.G.RESISTOR	47k	1/16W	

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Symbol No.	Part No.	Part Name	Description
R477	NRSA63J-473X	M.G.RESISTOR	47k 1/16W
R478	NRSA63J-473X	M.G.RESISTOR	47k 1/16W
R479	NRSA63J-473X	M.G.RESISTOR	47k 1/16W
R480	NRSA63J-473X	M.G.RESISTOR	47k 1/16W
R481	NRSA63J-473X	M.G.RESISTOR	47k 1/16W
R482	NRSA63J-473X	M.G.RESISTOR	47k 1/16W
R483	NRSA63J-473X	M.G.RESISTOR	47k 1/16W
R484	NRSA63J-473X	M.G.RESISTOR	47k 1/16W
R485	NRSA63J-473X	M.G.RESISTOR	47k 1/16W
R486	NRSA63J-473X	M.G.RESISTOR	47k 1/16W
R487	NRSA63J-473X	M.G.RESISTOR	47k 1/16W
R488	NRSA63J-473X	M.G.RESISTOR	47k 1/16W
R489	NRSA63J-473X	M.G.RESISTOR	47k 1/16W
R490	NRSA63J-473X	M.G.RESISTOR	47k 1/16W
R491	NRSA63J-473X	M.G.RESISTOR	47k 1/16W
R492	NRSA63J-473X	M.G.RESISTOR	47k 1/16W
R493	NRSA63J-473X	M.G.RESISTOR	47k 1/16W (E)
R494	NRSA63J-473X	M.G.RESISTOR	47k 1/16W (U)
R496	NRSA63J-473X	M.G.RESISTOR	47k 1/16W
R499	NRSA63J-473X	M.G.RESISTOR	47k 1/16W
R500	NRSA63J-471X	M.G.RESISTOR	470 1/16W
R501	NRSA63J-102X	M.G.RESISTOR	1k 1/16W
R503	NRSA63J-473X	M.G.RESISTOR	47k 1/16W
R510	NRSA63J-330X	M.G.RESISTOR	33 1/16W
R511	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R512	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R513	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R515	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R516	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R517	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R518	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R519	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R520	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R521	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R522	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R523	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R524	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R525	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R526	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R527	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R528	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R529	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R530	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R531	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R533	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R534	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R535	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R541	NRSA63J-102X	M.G.RESISTOR	1k 1/16W
R543	NRSA63J-473X	M.G.RESISTOR	47k 1/16W
R544	NRSA63J-473X	M.G.RESISTOR	47k 1/16W
R545	NRSA63J-473X	M.G.RESISTOR	47k 1/16W
R546	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R547	NRSA63J-473X	M.G.RESISTOR	47k 1/16W
R548	NRSA63J-473X	M.G.RESISTOR	47k 1/16W
R549	NRSA63J-473X	M.G.RESISTOR	47k 1/16W
R554	NRSA63J-473X	M.G.RESISTOR	47k 1/16W
R555	NRSA63J-473X	M.G.RESISTOR	47k 1/16W
R556	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R557	NRSA63J-103X	M.G.RESISTOR	10k 1/16W
R558	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R559	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R560	NRSA63J-103X	M.G.RESISTOR	10k 1/16W
R561	NRSA63J-103X	M.G.RESISTOR	10k 1/16W
R562	NRSA63J-103X	M.G.RESISTOR	10k 1/16W
R563	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R564	NRSA63J-561X	M.G.RESISTOR	560 1/16W
R565	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R608	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R609	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R615	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R620	NRSA63J-473X	M.G.RESISTOR	47k 1/16W
R622	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R948	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W

Symbol No.	Part No.	Part Name	Description
R949	NRSA63J-330X	M.G.RESISTOR	33 1/16W
R950	NRSA63J-330X	M.G.RESISTOR	33 1/16W
R951	NRSA63J-330X	M.G.RESISTOR	33 1/16W
R952	NRSA63J-330X	M.G.RESISTOR	33 1/16W
R953	NRSA63J-330X	M.G.RESISTOR	33 1/16W
R954	NRSA63J-330X	M.G.RESISTOR	33 1/16W
R955	NRSA63J-330X	M.G.RESISTOR	33 1/16W
R956	NRSA63J-330X	M.G.RESISTOR	33 1/16W
R957	NRSA63J-331X	M.G.RESISTOR	330 1/16W
R958	NRSA63J-472X	M.G.RESISTOR	4.7k 1/16W
R959	NRSA63J-473X	M.G.RESISTOR	47k 1/16W
R960	NRSA63J-473X	M.G.RESISTOR	47k 1/16W
R961	NRSA63J-102X	M.G.RESISTOR	1k 1/16W
R963	NRSA63J-471X	M.G.RESISTOR	470 1/16W
R965	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R966	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R967	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R971	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R972	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R973	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R974	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R975	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R976	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R977	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R981	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R982	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R983	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R984	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R985	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R986	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R987	NRSA63J-103X	M.G.RESISTOR	10k 1/16W
R988	NRSA63J-103X	M.G.RESISTOR	10k 1/16W
R989	NRSA63J-333X	M.G.RESISTOR	33k 1/16W
R990	NRSA63J-103X	M.G.RESISTOR	10k 1/16W
R991	NRSA63J-104X	M.G.RESISTOR	100k 1/16W
R992	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R993	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R994	NRSA63J-100X	M.G.RESISTOR	10 1/16W
R995	NRSA63J-100X	M.G.RESISTOR	10 1/16W
R996	NRSA63J-100X	M.G.RESISTOR	10 1/16W
R997	NRSA63J-100X	M.G.RESISTOR	10 1/16W
R998	NRSA63J-103X	M.G.RESISTOR	10k 1/16W
R999	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R1000	NRSA63J-103X	M.G.RESISTOR	10k 1/16W
R1001	NRSA63J-100X	M.G.RESISTOR	10 1/16W
R1002	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R1003	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R1005	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R1006	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R1007	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R1008	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R1010	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R1015	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R1016	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R1017	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R1018	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R1019	NRSA63J-510X	M.G.RESISTOR	51 1/16W
R1020	NRSA63J-510X	M.G.RESISTOR	51 1/16W
R1021	NRSA63J-510X	M.G.RESISTOR	51 1/16W
R1022	NRSA63J-510X	M.G.RESISTOR	51 1/16W
R1023	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R1024	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R1025	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R1026	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R1027	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R1028	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R1029	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R1030	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R1117	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R1134	NRSA63J-330X	M.G.RESISTOR	33 1/16W
R1135	NRSA63J-104X	M.G.RESISTOR	100k 1/16W
R1136	NRSA63J-104X	M.G.RESISTOR	100k 1/16W
R1137	NRSA63J-104X	M.G.RESISTOR	100k 1/16W

Symbol No.	Part No.	Part Name	Description	
R1138	NRSA63J-471X	M.G.RESISTOR	470	1/16W
R1139	NRSA63J-471X	M.G.RESISTOR	470	1/16W
R2000	NRSA63J-0R0X	M.G.RESISTOR	0	1/16W
R2001	NRSA63J-0R0X	M.G.RESISTOR	0	1/16W
R2002	NRSA63J-102X	M.G.RESISTOR	1k	1/16W
R2003	NRSA63J-102X	M.G.RESISTOR	1k	1/16W
R2011	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R2012	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R2013	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R2014	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R2016	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R2020	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R2024	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R2025	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R2026	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R2029	NRSA63J-0R0X	M.G.RESISTOR	0	1/16W
R2030	NRSA63J-0R0X	M.G.RESISTOR	0	1/16W
R2031	NRSA63J-0R0X	M.G.RESISTOR	0	1/16W
R2032	NRSA63J-0R0X	M.G.RESISTOR	0	1/16W
RA33	NRZ0015-473X	M.G.RESISTOR	47k	
RA34	NRZ0015-473X	M.G.RESISTOR	47k	
RA35	NRZ0015-473X	M.G.RESISTOR	47k	
RA39	NRZ0015-473X	M.G.RESISTOR	47k	
RA40	NRZ0015-473X	M.G.RESISTOR	47k	
RA41	NRZ0015-473X	M.G.RESISTOR	47k	
RA42	NRZ0015-473X	M.G.RESISTOR	47k	
RA43	NRZ0015-473X	M.G.RESISTOR	47k	
RA46	NRZ0015-473X	M.G.RESISTOR	47k	
RA47	NRZ0015-473X	M.G.RESISTOR	47k	
RA48	NRZ0015-473X	M.G.RESISTOR	47k	
RA49	NRZ0015-473X	M.G.RESISTOR	47k	
RA50	NRZ0015-473X	M.G.RESISTOR	47k	
RA51	NRZ0015-473X	M.G.RESISTOR	47k	
RA52	NRZ0015-473X	M.G.RESISTOR	47k	
RA53	NRZ0015-473X	M.G.RESISTOR	47k	
RA54	NRZ0015-473X	M.G.RESISTOR	47k	
RA55	NRZ0015-473X	M.G.RESISTOR	47k	
RA56	NRZ0015-473X	M.G.RESISTOR	47k	
RA57	NRZ0015-473X	M.G.RESISTOR	47k	
RA58	NRZ0015-473X	M.G.RESISTOR	47k	
RA59	NRZ0015-473X	M.G.RESISTOR	47k	
RA60	NRZ0015-473X	M.G.RESISTOR	47k	
C1	NCB11AK-106X	CER.CAPACITOR	10	10V
C200	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C201	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C259	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C262	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C263	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C264	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C265	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C266	NCB31HK-103X	CER.CAPACITOR	0.01	50V
C267	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C268	NCB31HK-103X	CER.CAPACITOR	0.01	50V
C269	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C270	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C271	NCB31HK-103X	CER.CAPACITOR	0.01	50V
C272	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C273	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C274	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C275	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C276	NCB31HK-103X	CER.CAPACITOR	0.01	50V
C277	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C278	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C279	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C281	NCB11CK-105X	CER.CAPACITOR	1	16V
C282	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C283	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C284	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C285	NCB30JK-105X	CER.CAPACITOR	1	6.3V
C286	NDC31HJ-120X	CER.CAPACITOR	12p	50V

Symbol No.	Part No.	Part Name	Description	
C287	NCB31HK-682X	CER.CAPACITOR	6800p	50V
C288	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C289	NCB31HK-103X	CER.CAPACITOR	0.01	50V
C290	NCB31HK-103X	CER.CAPACITOR	0.01	50V
C291	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C292	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C293	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C294	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C296	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C297	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C298	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C299	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C300	NCB31HK-103X	CER.CAPACITOR	0.01	50V
C301	NCB31HK-103X	CER.CAPACITOR	0.01	50V
C303	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C304	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C492	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C493	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C494	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C495	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C496	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C497	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C498	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C499	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C500	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C501	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C502	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C503	NCB11AK-106X	CER.CAPACITOR	10	10V
C504	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C505	NCB11AK-106X	CER.CAPACITOR	10	10V
C506	NCB11AK-106X	CER.CAPACITOR	10	10V
C507	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C508	NCB11AK-106X	CER.CAPACITOR	10	10V
C509	NCB11AK-225X	CER.CAPACITOR	2.2	10V
C510	NCB31HK-682X	CER.CAPACITOR	6800p	50V
C511	NCB11CK-105X	CER.CAPACITOR	1	16V
C512	NCB31HK-103X	CER.CAPACITOR	0.01	50V
C513	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C514	NCB11AK-106X	CER.CAPACITOR	10	10V
C515	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C516	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C517	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C518	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C519	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C520	NCB11CK-105X	CER.CAPACITOR	1	16V
C521	NCB11CK-105X	CER.CAPACITOR	1	16V
C522	NCB11CK-105X	CER.CAPACITOR	1	16V
C523	NCB11CK-105X	CER.CAPACITOR	1	16V
C524	NCB11CK-105X	CER.CAPACITOR	1	16V
C525	NCB11CK-475X	CER.CAPACITOR	4.7	16V
C526	NCB11CK-105X	CER.CAPACITOR	1	16V
C527	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C528	NCB11CK-105X	CER.CAPACITOR	1	16V
C529	NCB11CK-105X	CER.CAPACITOR	1	16V
C530	NCB11CK-105X	CER.CAPACITOR	1	16V
C531	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C532	NDC31HJ-101X	CER.CAPACITOR	100p	50V
C533	NCB11AK-106X	CER.CAPACITOR	10	10V
C534	NCJ10JM-476X-A	CER.CAPACITOR	47	6.3V
C535	NDC31HJ-101X	CER.CAPACITOR	100p	50V
C536	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C537	NCB11AK-106X	CER.CAPACITOR	10	10V
C538	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C539	NCB11AK-225X	CER.CAPACITOR	2.2	10V
C540	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C541	NCB30JK-474X	CER.CAPACITOR	0.47	6.3V
C600	NBSH0JM-337X	TAN.CAPACITOR	330	6.3V
C601	NCB11EK-105X	CER.CAPACITOR	1	25V
C602	NBSH0JM-337X	TAN.CAPACITOR	330	6.3V
C603	NCB31HK-103X	CER.CAPACITOR	0.01	50V
C801	NCB31HK-103X	CER.CAPACITOR	0.01	50V
C987	NCB31CK-104X	CER.CAPACITOR	0.1	16V

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Symbol No.	Part No.	Part Name	Description
C988	NCB31CK-104X	CER.CAPACITOR	0.1 16V
L37	NQLA3GK-101X	COIL	100uH
L38	NQLA3GK-101X	COIL	100uH
L39	NQL904J-680X	COIL	68uH
L40	NQL904J-220X	COIL	22uH
X3	NAX0723-001X	CRYSTAL	8.5MHz
X4	NAX0564-001X	CRYSTAL	32.768kHz
CN4	QGA1002F1-03X	CONNECTOR	3PIN
CN7	QGB0502L1-40X	CONNECTOR	40PIN
CN9	QGA1002F1-05X	CONNECTOR	5PIN
CN10	QGF0508F1-24X	CONNECTOR	24PIN
CN11	QGA1002F1-06X	CONNECTOR	6PIN
CN12	QGA1002F1-07X	CONNECTOR	7PIN
CN13	QGF0508F1-15X	CONNECTOR	15PIN
CN14	QGF0508F1-50X	CONNECTOR	50PIN
CN21	QGF0534F1-20X	CONNECTOR	20PIN (U)
	QGF0508F1-20X	CONNECTOR	20PIN (E)
CN22	QGA1002F1-12X	CONNECTOR	12PIN
CN23	QGA1002F1-08X	CONNECTOR	8PIN
CN24	QGF0508F1-50X	CONNECTOR	50PIN
CN34	QGF0508F1-10X	CONNECTOR	10PIN
CN48	QGF0508F1-10X	CONNECTOR	10PIN
CN49	QGB0805M5-E0	CONNECTOR	140PIN
CN51	NNZ0133-001X	CONNECTOR	
CN52	NNZ0133-001X	CONNECTOR	
CN90	QGA1002F1-02X	CONNECTOR	
BT1	QAB0020-001	LI BATTERY	
K13	NQR0269-004X	FERRITE BEADS	
K15	NQR0269-004X	FERRITE BEADS	
K16	NQR0269-004X	FERRITE BEADS	
K20	NQR0351-002X	FERRITE BEADS	
K21	NQR0265-003X	FERRITE BEADS	
K22	NQR0265-003X	FERRITE BEADS	
K23	NQR0265-001X	FERRITE BEADS	
K24	NQR0265-001X	FERRITE BEADS	
K25	NQR0265-001X	FERRITE BEADS	
K26	NQR0265-001X	FERRITE BEADS	
K27	NQR0265-001X	FERRITE BEADS	

6.6 MIF BOARD ASSEMBLY PARTS LIST 2 0

CK2801C0B1 (GY-HD101E)

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Symbol No.	Part No.	Part Name	Description
IC58	PLSC1590	I.C.(M)	HD64F2368VTE34V
IC59	TC7W34FU-X	I.C.(M)	TOSHIBA
IC60	TC7W74FU-X	I.C.(M)	TOSHIBA
IC61	M95320-WMN6P-X	I.C.(M)	MITSUBISHI
IC62	MM1573AN-X	I.C.(M)	MITSUMI
IC63	RS5C314-X	I.C.(M)	RICOH
IC64	R3112N261A-X	I.C.(M)	RICOH
IC65	LC4064V75T100C1	I.C.(M)	LATTICE
IC66	LC4128V75T100C2	I.C.(M)	LATTICE
IC67	SN74AHC1G14DC-X	I.C.(M)	TEXAS
IC68	SN74AHC1G14DC-X	I.C.(M)	TEXAS
IC96	XC2C2567VQG100C	I.C.(M)	XILINX
IC97	S29AL016D70TFI1	I.C.(M)	SPANSION
IC98	TC7W34FU-X	I.C.(M)	TOSHIBA
IC99	CXM3004R	I.C.(M)	SONY
IC100	AK5357VT-X	I.C.(M)	ASAHI KASEI
IC101	AK4384VT-X	I.C.(M)	ASAHI KASEI
IC109	NJM78L12UA-X	I.C.(M)	JRC
Q1	DTC124EUA-X	TRANSISTOR	ROHM
Q2	DTC124EUA-X	TRANSISTOR	ROHM
Q11	DTA124EUA-X	TRANSISTOR	ROHM
Q12	DTC124EUA-X	TRANSISTOR	ROHM
Q13	DTA124EUA-X	TRANSISTOR	ROHM
Q14	SSM3K15FS-X	TRANSISTOR	TOSHIBA
Q16	DTC124EUA-X	TRANSISTOR	ROHM
Q17	DTC124EUA-X	TRANSISTOR	ROHM
Q20	DTC124EUA-X	TRANSISTOR	ROHM
Q21	2SC4626J/BC/-X	TRANSISTOR	MATSUSHITA
Q22	DTA124EUA-X	TRANSISTOR	ROHM
Q24	DTC124EUA-X	TRANSISTOR	ROHM
Q29	DTC124EUA-X	TRANSISTOR	ROHM
Q30	DTC124EUA-X	TRANSISTOR	ROHM
Q31	2SA1790J/BC/-X	TRANSISTOR	MATSUSHITA
Q32	DTC124EUA-X	TRANSISTOR	ROHM
Q33	2SC4626J/BC/-X	TRANSISTOR	MATSUSHITA
Q34	2SA1790J/BC/-X	TRANSISTOR	MATSUSHITA
Q35	2SC4626J/BC/-X	TRANSISTOR	MATSUSHITA
Q36	2SA1790J/BC/-X	TRANSISTOR	MATSUSHITA
Q37	DTC124EUA-X	TRANSISTOR	ROHM
Q500	DTC124EUA-X	TRANSISTOR	ROHM
Q913	DTA124EUA-X	TRANSISTOR	ROHM
Q914	DTA124EUA-X	TRANSISTOR	ROHM
D1	SML-020MVT-W	L.E.D.	ROHM
D18	HZM3.9NB2-X	ZENER DIODE	HITACHI
D19	MA741WK-X	DIODE	MATSUSHITA
D20	MA741WK-X	DIODE	MATSUSHITA
D36	SML-020MVT-W	L.E.D.	ROHM
D46	HZM3.0NB1-X	ZENER DIODE	HITACHI
D47	HZM3.9NB2-X	ZENER DIODE	HITACHI
R4	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R5	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R6	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R7	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R8	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R369	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R370	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R371	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R372	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R373	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R375	NRSA63J-104X	M.G.RESISTOR	100k 1/16W
R377	NRSA63J-473X	M.G.RESISTOR	47k 1/16W
R378	NRSA63J-103X	M.G.RESISTOR	10k 1/16W
R379	NRSA63J-473X	M.G.RESISTOR	47k 1/16W
R381	NRSA63J-473X	M.G.RESISTOR	47k 1/16W
R382	NRSA63J-683X	M.G.RESISTOR	68k 1/16W
R383	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R384	NRSA63J-473X	M.G.RESISTOR	47k 1/16W
R385	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R387	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W

Symbol No.	Part No.	Part Name	Description	
R388	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R389	NRSA63J-102X	M.G.RESISTOR	1k	1/16W
R390	NRSA63J-0R0X	M.G.RESISTOR	0	1/16W
R392	NRSA63J-0R0X	M.G.RESISTOR	0	1/16W
R393	NRSA63J-101X	M.G.RESISTOR	100	1/16W
R395	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R396	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R397	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R399	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R400	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R401	NRSA63J-102X	M.G.RESISTOR	1k	1/16W
R402	NRSA63J-333X	M.G.RESISTOR	33k	1/16W
R403	NRSA63J-683X	M.G.RESISTOR	68k	1/16W
R404	NRSA63J-752X	M.G.RESISTOR	7.5k	1/16W
R405	NRSA63J-123X	M.G.RESISTOR	12k	1/16W
R406	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R408	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R409	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R411	NRSA63J-472X	M.G.RESISTOR	4.7k	1/16W
R413	NRSA63J-223X	M.G.RESISTOR	22k	1/16W
R414	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R415	NRSA63J-105X	M.G.RESISTOR	1M	1/16W
R416	NRSA63J-0R0X	M.G.RESISTOR	0	1/16W
R417	NRSA63J-0R0X	M.G.RESISTOR	0	1/16W
R418	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R419	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R420	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R421	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R422	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R423	NRSA63J-0R0X	M.G.RESISTOR	0	1/16W
R424	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R425	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R426	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R427	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R428	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R430	NRSA63J-103X	M.G.RESISTOR	10k	1/16W
R431	NRSA63J-0R0X	M.G.RESISTOR	0	1/16W
R432	NRSA63J-0R0X	M.G.RESISTOR	0	1/16W
R433	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R434	NRSA63J-471X	M.G.RESISTOR	470	1/16W
R435	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R436	NRSA63J-471X	M.G.RESISTOR	470	1/16W
R437	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R438	NRSA63J-0R0X	M.G.RESISTOR	0	1/16W
R439	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R440	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R441	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R442	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R443	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R444	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R445	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R446	NRSA63J-0R0X	M.G.RESISTOR	0	1/16W
R449	NRSA63J-0R0X	M.G.RESISTOR	0	1/16W
R450	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R453	NRSA63J-0R0X	M.G.RESISTOR	0	1/16W
R456	NRSA63J-224X	M.G.RESISTOR	220k	1/16W
R457	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R458	NRSA63J-224X	M.G.RESISTOR	220k	1/16W
R460	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R462	NRSA63J-103X	M.G.RESISTOR	10k	1/16W
R464	NRSA63J-101X	M.G.RESISTOR	100	1/16W
R465	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R466	NRSA63J-101X	M.G.RESISTOR	100	1/16W
R469	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R470	NRSA63J-103X	M.G.RESISTOR	10k	1/16W
R471	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R472	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R473	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R474	NRSA63J-101X	M.G.RESISTOR	100	1/16W
R475	NRSA63J-101X	M.G.RESISTOR	100	1/16W
R476	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R477	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R478	NRSA63J-473X	M.G.RESISTOR	47k	1/16W

Symbol No.	Part No.	Part Name	Description	
R479	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R480	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R481	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R482	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R483	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R484	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R485	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R486	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R487	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R488	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R489	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R490	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R491	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R492	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R493	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R496	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R499	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R500	NRSA63J-471X	M.G.RESISTOR	470	1/16W
R501	NRSA63J-102X	M.G.RESISTOR	1k	1/16W
R503	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R510	NRSA63J-330X	M.G.RESISTOR	33	1/16W
R511	NRSA63J-101X	M.G.RESISTOR	100	1/16W
R512	NRSA63J-101X	M.G.RESISTOR	100	1/16W
R513	NRSA63J-101X	M.G.RESISTOR	100	1/16W
R515	NRSA63J-101X	M.G.RESISTOR	100	1/16W
R516	NRSA63J-101X	M.G.RESISTOR	100	1/16W
R517	NRSA63J-101X	M.G.RESISTOR	100	1/16W
R518	NRSA63J-101X	M.G.RESISTOR	100	1/16W
R519	NRSA63J-101X	M.G.RESISTOR	100	1/16W
R520	NRSA63J-101X	M.G.RESISTOR	100	1/16W
R521	NRSA63J-101X	M.G.RESISTOR	100	1/16W
R522	NRSA63J-101X	M.G.RESISTOR	100	1/16W
R523	NRSA63J-101X	M.G.RESISTOR	100	1/16W
R524	NRSA63J-101X	M.G.RESISTOR	100	1/16W
R525	NRSA63J-101X	M.G.RESISTOR	100	1/16W
R526	NRSA63J-101X	M.G.RESISTOR	100	1/16W
R527	NRSA63J-101X	M.G.RESISTOR	100	1/16W
R528	NRSA63J-101X	M.G.RESISTOR	100	1/16W
R529	NRSA63J-101X	M.G.RESISTOR	100	1/16W
R530	NRSA63J-101X	M.G.RESISTOR	100	1/16W
R531	NRSA63J-101X	M.G.RESISTOR	100	1/16W
R533	NRSA63J-101X	M.G.RESISTOR	100	1/16W
R534	NRSA63J-101X	M.G.RESISTOR	100	1/16W
R535	NRSA63J-101X	M.G.RESISTOR	100	1/16W
R541	NRSA63J-102X	M.G.RESISTOR	1k	1/16W
R543	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R544	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R545	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R546	NRSA63J-101X	M.G.RESISTOR	100	1/16W
R547	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R548	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R549	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R554	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R555	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R556	NRSA63J-101X	M.G.RESISTOR	100	1/16W
R557	NRSA63J-103X	M.G.RESISTOR	10k	1/16W
R558	NRSA63J-223X	M.G.RESISTOR	22k	1/16W
R559	NRSA63J-101X	M.G.RESISTOR	100	1/16W
R560	NRSA63J-103X	M.G.RESISTOR	10k	1/16W
R561	NRSA63J-103X	M.G.RESISTOR	10k	1/16W
R562	NRSA63J-103X	M.G.RESISTOR	10k	1/16W
R563	NRSA63J-223X	M.G.RESISTOR	22k	1/16W
R564	NRSA63J-561X	M.G.RESISTOR	560	1/16W
R565	NRSA63J-223X	M.G.RESISTOR	22k	1/16W
R608	NRSA63J-0R0X	M.G.RESISTOR	0	1/16W
R609	NRSA63J-0R0X	M.G.RESISTOR	0	1/16W
R615	NRSA63J-0R0X	M.G.RESISTOR	0	1/16W
R620	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R622	NRSA63J-0R0X	M.G.RESISTOR	0	1/16W
R948	NRSA63J-0R0X	M.G.RESISTOR	0	1/16W
R949	NRSA63J-330X	M.G.RESISTOR	33	1/16W
R950	NRSA63J-330X	M.G.RESISTOR	33	1/16W
R951	NRSA63J-330X	M.G.RESISTOR	33	1/16W

2 0 [MIF]

Symbol No.	Part No.	Part Name	Description	
R952	NRSA63J-330X	M.G.RESISTOR	33	1/16W
R953	NRSA63J-330X	M.G.RESISTOR	33	1/16W
R954	NRSA63J-330X	M.G.RESISTOR	33	1/16W
R955	NRSA63J-330X	M.G.RESISTOR	33	1/16W
R956	NRSA63J-330X	M.G.RESISTOR	33	1/16W
R957	NRSA63J-331X	M.G.RESISTOR	330	1/16W
R958	NRSA63J-472X	M.G.RESISTOR	4.7k	1/16W
R959	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R960	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R961	NRSA63J-102X	M.G.RESISTOR	1k	1/16W
R963	NRSA63J-471X	M.G.RESISTOR	470	1/16W
R965	NRSA63J-0R0X	M.G.RESISTOR	0	1/16W
R966	NRSA63J-0R0X	M.G.RESISTOR	0	1/16W
R967	NRSA63J-0R0X	M.G.RESISTOR	0	1/16W
R971	NRSA63J-0R0X	M.G.RESISTOR	0	1/16W
R972	NRSA63J-0R0X	M.G.RESISTOR	0	1/16W
R973	NRSA63J-0R0X	M.G.RESISTOR	0	1/16W
R974	NRSA63J-0R0X	M.G.RESISTOR	0	1/16W
R975	NRSA63J-0R0X	M.G.RESISTOR	0	1/16W
R976	NRSA63J-0R0X	M.G.RESISTOR	0	1/16W
R977	NRSA63J-0R0X	M.G.RESISTOR	0	1/16W
R981	NRSA63J-0R0X	M.G.RESISTOR	0	1/16W
R982	NRSA63J-0R0X	M.G.RESISTOR	0	1/16W
R983	NRSA63J-0R0X	M.G.RESISTOR	0	1/16W
R984	NRSA63J-0R0X	M.G.RESISTOR	0	1/16W
R985	NRSA63J-0R0X	M.G.RESISTOR	0	1/16W
R986	NRSA63J-0R0X	M.G.RESISTOR	0	1/16W
R987	NRSA63J-103X	M.G.RESISTOR	10k	1/16W
R988	NRSA63J-103X	M.G.RESISTOR	10k	1/16W
R989	NRSA63J-333X	M.G.RESISTOR	33k	1/16W
R990	NRSA63J-103X	M.G.RESISTOR	10k	1/16W
R991	NRSA63J-104X	M.G.RESISTOR	100k	1/16W
R992	NRSA63J-0R0X	M.G.RESISTOR	0	1/16W
R993	NRSA63J-0R0X	M.G.RESISTOR	0	1/16W
R994	NRSA63J-100X	M.G.RESISTOR	10	1/16W
R995	NRSA63J-100X	M.G.RESISTOR	10	1/16W
R996	NRSA63J-100X	M.G.RESISTOR	10	1/16W
R997	NRSA63J-100X	M.G.RESISTOR	10	1/16W
R998	NRSA63J-103X	M.G.RESISTOR	10k	1/16W
R999	NRSA63J-223X	M.G.RESISTOR	22k	1/16W
R1000	NRSA63J-103X	M.G.RESISTOR	10k	1/16W
R1001	NRSA63J-100X	M.G.RESISTOR	10	1/16W
R1002	NRSA63J-223X	M.G.RESISTOR	22k	1/16W
R1003	NRSA63J-223X	M.G.RESISTOR	22k	1/16W
R1005	NRSA63J-101X	M.G.RESISTOR	100	1/16W
R1006	NRSA63J-101X	M.G.RESISTOR	100	1/16W
R1007	NRSA63J-101X	M.G.RESISTOR	100	1/16W
R1008	NRSA63J-101X	M.G.RESISTOR	100	1/16W
R1010	NRSA63J-0R0X	M.G.RESISTOR	0	1/16W
R1015	NRSA63J-0R0X	M.G.RESISTOR	0	1/16W
R1016	NRSA63J-0R0X	M.G.RESISTOR	0	1/16W
R1017	NRSA63J-0R0X	M.G.RESISTOR	0	1/16W
R1018	NRSA63J-0R0X	M.G.RESISTOR	0	1/16W
R1019	NRSA63J-510X	M.G.RESISTOR	51	1/16W
R1020	NRSA63J-510X	M.G.RESISTOR	51	1/16W
R1021	NRSA63J-510X	M.G.RESISTOR	51	1/16W
R1022	NRSA63J-510X	M.G.RESISTOR	51	1/16W
R1023	NRSA63J-101X	M.G.RESISTOR	100	1/16W
R1024	NRSA63J-101X	M.G.RESISTOR	100	1/16W
R1025	NRSA63J-101X	M.G.RESISTOR	100	1/16W
R1026	NRSA63J-101X	M.G.RESISTOR	100	1/16W
R1027	NRSA63J-101X	M.G.RESISTOR	100	1/16W
R1028	NRSA63J-101X	M.G.RESISTOR	100	1/16W
R1029	NRSA63J-101X	M.G.RESISTOR	100	1/16W
R1030	NRSA63J-101X	M.G.RESISTOR	100	1/16W
R1117	NRSA63J-0R0X	M.G.RESISTOR	0	1/16W
R1134	NRSA63J-330X	M.G.RESISTOR	33	1/16W
R1135	NRSA63J-104X	M.G.RESISTOR	100k	1/16W
R1136	NRSA63J-104X	M.G.RESISTOR	100k	1/16W
R1137	NRSA63J-104X	M.G.RESISTOR	100k	1/16W
R1138	NRSA63J-471X	M.G.RESISTOR	470	1/16W
R1139	NRSA63J-471X	M.G.RESISTOR	470	1/16W
R2000	NRSA63J-0R0X	M.G.RESISTOR	0	1/16W

Symbol No.	Part No.	Part Name	Description	
R2001	NRSA63J-0R0X	M.G.RESISTOR	0	1/16W
R2002	NRSA63J-102X	M.G.RESISTOR	1k	1/16W
R2003	NRSA63J-102X	M.G.RESISTOR	1k	1/16W
R2011	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R2012	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R2013	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R2014	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R2016	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R2020	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R2024	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R2025	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R2026	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R2029	NRSA63J-0R0X	M.G.RESISTOR	0	1/16W
R2030	NRSA63J-0R0X	M.G.RESISTOR	0	1/16W
R2031	NRSA63J-0R0X	M.G.RESISTOR	0	1/16W
R2032	NRSA63J-0R0X	M.G.RESISTOR	0	1/16W
RA33	NRZ0015-473X	M.G.RESISTOR	47k	
RA34	NRZ0015-473X	M.G.RESISTOR	47k	
RA35	NRZ0015-473X	M.G.RESISTOR	47k	
RA39	NRZ0015-473X	M.G.RESISTOR	47k	
RA40	NRZ0015-473X	M.G.RESISTOR	47k	
RA41	NRZ0015-473X	M.G.RESISTOR	47k	
RA42	NRZ0015-473X	M.G.RESISTOR	47k	
RA43	NRZ0015-473X	M.G.RESISTOR	47k	
RA46	NRZ0015-473X	M.G.RESISTOR	47k	
RA47	NRZ0015-473X	M.G.RESISTOR	47k	
RA48	NRZ0015-473X	M.G.RESISTOR	47k	
RA49	NRZ0015-473X	M.G.RESISTOR	47k	
RA50	NRZ0015-473X	M.G.RESISTOR	47k	
RA51	NRZ0015-473X	M.G.RESISTOR	47k	
RA52	NRZ0015-473X	M.G.RESISTOR	47k	
RA53	NRZ0015-473X	M.G.RESISTOR	47k	
RA54	NRZ0015-473X	M.G.RESISTOR	47k	
RA55	NRZ0015-473X	M.G.RESISTOR	47k	
RA56	NRZ0015-473X	M.G.RESISTOR	47k	
RA57	NRZ0015-473X	M.G.RESISTOR	47k	
RA58	NRZ0015-473X	M.G.RESISTOR	47k	
RA59	NRZ0015-473X	M.G.RESISTOR	47k	
RA60	NRZ0015-473X	M.G.RESISTOR	47k	
C1	NCB11AK-106X	CER.CAPACITOR	10	10V
C200	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C201	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C259	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C262	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C263	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C264	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C265	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C266	NCB31HK-103X	CER.CAPACITOR	0.01	50V
C267	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C268	NCB31HK-103X	CER.CAPACITOR	0.01	50V
C269	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C270	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C271	NCB31HK-103X	CER.CAPACITOR	0.01	50V
C272	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C273	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C274	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C275	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C276	NCB31HK-103X	CER.CAPACITOR	0.01	50V
C277	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C278	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C279	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C281	NCB11CK-105X	CER.CAPACITOR	1	16V
C282	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C283	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C284	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C285	NCB30JK-105X	CER.CAPACITOR	1	6.3V
C286	NDC31HJ-120X	CER.CAPACITOR	12p	50V
C287	NCB31HK-682X	CER.CAPACITOR	6800p	50V
C288	NCB31CK-104X	CER.CAPACITOR	0.1	16V

Symbol No.	Part No.	Part Name	Description
C289	NCB31HK-103X	CER.CAPACITOR	0.01 50V
C290	NCB31HK-103X	CER.CAPACITOR	0.01 50V
C291	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C292	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C293	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C294	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C296	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C297	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C298	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C299	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C300	NCB31HK-103X	CER.CAPACITOR	0.01 50V
C301	NCB31HK-103X	CER.CAPACITOR	0.01 50V
C303	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C304	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C492	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C493	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C494	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C495	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C496	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C497	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C498	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C499	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C500	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C501	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C502	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C503	NCB11AK-106X	CER.CAPACITOR	10 10V
C504	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C505	NCB11AK-106X	CER.CAPACITOR	10 10V
C506	NCB11AK-106X	CER.CAPACITOR	10 10V
C507	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C508	NCB11AK-106X	CER.CAPACITOR	10 10V
C509	NCB11AK-225X	CER.CAPACITOR	2.2 10V
C510	NCB31HK-682X	CER.CAPACITOR	6800p 50V
C511	NCB11CK-105X	CER.CAPACITOR	1 16V
C512	NCB31HK-103X	CER.CAPACITOR	0.01 50V
C513	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C514	NCB11AK-106X	CER.CAPACITOR	10 10V
C515	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C516	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C517	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C518	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C519	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C520	NCB11CK-105X	CER.CAPACITOR	1 16V
C521	NCB11CK-105X	CER.CAPACITOR	1 16V
C522	NCB11CK-105X	CER.CAPACITOR	1 16V
C523	NCB11CK-105X	CER.CAPACITOR	1 16V
C524	NCB11CK-105X	CER.CAPACITOR	1 16V
C525	NCB11CK-475X	CER.CAPACITOR	4.7 16V
C526	NCB11CK-105X	CER.CAPACITOR	1 16V
C527	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C528	NCB11CK-105X	CER.CAPACITOR	1 16V
C529	NCB11CK-105X	CER.CAPACITOR	1 16V
C530	NCB11CK-105X	CER.CAPACITOR	1 16V
C531	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C532	NDC31HJ-101X	CER.CAPACITOR	100p 50V
C533	NCB11AK-106X	CER.CAPACITOR	10 10V
C534	NCJ10JM-476X-A	CER.CAPACITOR	47 6.3V
C535	NDC31HJ-101X	CER.CAPACITOR	100p 50V
C536	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C537	NCB11AK-106X	CER.CAPACITOR	10 10V
C538	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C539	NCB11AK-225X	CER.CAPACITOR	2.2 10V
C540	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C541	NCB30JK-474X	CER.CAPACITOR	0.47 6.3V
C600	NBSH0JM-337X	TAN.CAPACITOR	330 6.3V
C601	NCB11EK-105X	CER.CAPACITOR	1 25V
C602	NBSH0JM-337X	TAN.CAPACITOR	330 6.3V
C603	NCB31HK-103X	CER.CAPACITOR	0.01 50V
C801	NCB31HK-103X	CER.CAPACITOR	0.01 50V
C987	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C988	NCB31CK-104X	CER.CAPACITOR	0.1 16V

Symbol No.	Part No.	Part Name	Description
L37	NQLA3GK-101X	COIL	100uH
L38	NQLA3GK-101X	COIL	100uH
L39	NQL904J-680X	COIL	68uH
L40	NQL904J-220X	COIL	22uH
X3	NAX0723-001X	CRYSTAL	8.5MHz
X4	NAX0564-001X	CRYSTAL	32.768kHz
CN4	QGA1002F1-03X	CONNECTOR	3PIN
CN7	QGB0502L1-40X	CONNECTOR	40PIN
CN9	QGA1002F1-05X	CONNECTOR	5PIN
CN10	QGF0508F1-24X	CONNECTOR	24PIN
CN11	QGA1002F1-06X	CONNECTOR	6PIN
CN12	QGA1002F1-07X	CONNECTOR	7PIN
CN13	QGF0508F1-15X	CONNECTOR	15PIN
CN14	QGF0508F1-50X	CONNECTOR	50PIN
CN21	QGF0508F1-20X	CONNECTOR	20PIN
CN22	QGA1002F1-12X	CONNECTOR	12PIN
CN23	QGA1002F1-08X	CONNECTOR	8PIN
CN24	QGF0508F1-50X	CONNECTOR	50PIN
CN34	QGF0508F1-10X	CONNECTOR	10PIN
CN48	QGF0508F1-10X	CONNECTOR	10PIN
CN49	QGB0805M5-E0	CONNECTOR	140PIN
CN51	NNZ0133-001X	CONNECTOR	
CN52	NNZ0133-001X	CONNECTOR	
CN90	QGA1002F1-02X	CONNECTOR	
BT1	QAB0020-001	LI BATTERY	
K13	NQR0269-004X	FERRITE BEADS	
K15	NQR0269-004X	FERRITE BEADS	
K16	NQR0269-004X	FERRITE BEADS	
K20	NQR0351-002X	FERRITE BEADS	
K21	NQR0265-003X	FERRITE BEADS	
K22	NQR0265-003X	FERRITE BEADS	
K23	NQR0265-001X	FERAITE BEADS	
K24	NQR0265-001X	FERAITE BEADS	
K25	NQR0265-001X	FERAITE BEADS	
K26	NQR0265-001X	FERAITE BEADS	
K27	NQR0265-001X	FERAITE BEADS	

6.7 PS BOARD ASSEMBLY PARTS LIST 2 1

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Symbol No.	Part No.	Part Name	Description	
IC1	TA75S393F-W	I.C.(M)	TOSHIBA	
IC2	MM1573DN-X	I.C.(M)	MITSUMI	
IC3	TC74HC4538AFT-X	I.C.(M)	TOSHIBA	
IC4	TC7S00F-X	I.C.(M)	TOSHIBA	
IC5	LTC3728LXCUH-X	I.C.(M)	LINEAR	
IC6	BD9730KV-X	I.C.(M)	ROHM	
IC7	TK72100CSC-X	I.C.(M)	TOKO DENSHI	
IC8	TA75S01F-W	I.C.(M)	TOSHIBA	
Q1	FDS6575-X	TRANSISTOR	FAIR CHILD	
Q2	2SC4081/QRS/-X	TRANSISTOR	ROHM	
Q3	DTC144EUA-X	TRANSISTOR	ROHM	
Q4	2SA1576A/QRS/-X	TRANSISTOR	ROHM	
Q5	DTC144EUA-X	TRANSISTOR	ROHM	
Q6	2SC4081/QRS/-X	TRANSISTOR	ROHM	
Q7	2SA1576A/QRS/-X	TRANSISTOR	ROHM	
Q8	DTC144EUA-X	TRANSISTOR	ROHM	
Q10	DTC144EUA-X	TRANSISTOR	ROHM	
Q11	SP8K1-X	TRANSISTOR	ROHM	
Q12	SP8K1-X	TRANSISTOR	ROHM	
Q13	RTQ035N03-W	TRANSISTOR	MITSUBISHI	
Q14	RSQ035P03-W	TRANSISTOR	ROHM	
Q15	RSQ035P03-W	TRANSISTOR	ROHM	
Q16	RSQ035P03-W	TRANSISTOR	ROHM	
Q17	RSQ035P03-W	TRANSISTOR	ROHM	
Q18	2SC4081/QRS/-X	TRANSISTOR	ROHM	
Q19	2SB1189/PQR/-W	TRANSISTOR	ROHM	
Q20	2SC4081/QRS/-X	TRANSISTOR	ROHM	
Q21	2SC4081/QRS/-X	TRANSISTOR	ROHM	
Q22	2SC4081/QRS/-X	TRANSISTOR	ROHM	
Q23	SP8K4-X	TRANSISTOR	ROHM	
Q25	DTC144EUA-X	TRANSISTOR	ROHM	
Q26	2SA1576A/QRS/-X	TRANSISTOR	ROHM	
D1	RB051L-40-X	SB.DIODE	ROHM	
D2	RB051L-40-X	SB.DIODE	ROHM	
D3	HZU3CLL-X	ZENER DIODE	HITACHI	
D4	HZM18NB2-X	ZENER DIODE	HITACHI	
D5	MA8110/M/-X	ZENER DIODE	MATSUSHITA	
D6	1SS355-X	DIODE	ROHM	
D7	1SS357-X	DIODE	TOSHIBA	
D8	1SS357-X	DIODE	TOSHIBA	
D9	RB160M-30-X	SB DIODE	ROHM	
D10	MA736-X	DIODE	MATSUSHITA	
D11	RB160M-30-X	SB DIODE	ROHM	
D12	1SS306-W	DIODE	TOSHIBA	
D13	RB160M-30-X	SB DIODE	ROHM	
D14	RB160M-30-X	SB DIODE	ROHM	
D15	RB160M-30-X	SB DIODE	ROHM	
D16	RB160M-30-X	SB DIODE	ROHM	
D17	RB160M-30-X	SB DIODE	ROHM	
D18	RB160M-30-X	SB DIODE	ROHM	
D19	RB160M-30-X	SB DIODE	ROHM	
D20	1SS355-X	DIODE	ROHM	
D21	1SS355-X	DIODE	ROHM	
R1	NRSA63J-182X	M.G.RESISTOR	1.8k	1/16W
R2	NRSA63D-104X	M.G.RESISTOR	100k	1/16W
R3	NRSA63D-304X	M.G.RESISTOR	300k	1/16W
R4	NRSA63D-474X	M.G.RESISTOR	470k	1/16W
R5	NRSA63D-105X	M.G.RESISTOR	1M	1/16W
R6	NRSA63D-104X	M.G.RESISTOR	100k	1/16W
R7	NRSA63J-103X	M.G.RESISTOR	10k	1/16W
R8	NRSA63J-472X	M.G.RESISTOR	4.7k	1/16W
R9	NRSA63J-472X	M.G.RESISTOR	4.7k	1/16W
R10	NRSA63J-472X	M.G.RESISTOR	4.7k	1/16W
R11	NRSA63J-101X	M.G.RESISTOR	100	1/16W
R12	NRSA63J-223X	M.G.RESISTOR	22k	1/16W
R13	NRSA63J-101X	M.G.RESISTOR	100	1/16W
R14	NRSA63J-101X	M.G.RESISTOR	100	1/16W
R16	NRSA63D-474X	M.G.RESISTOR	470k	1/16W
R17	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R18	NRSA63D-474X	M.G.RESISTOR	470k	1/16W
R19	NRSA63D-473X	M.G.RESISTOR	47k	1/16W
R20	NRSA63J-103X	M.G.RESISTOR	10k	1/16W
R21	NRSA63D-473X	M.G.RESISTOR	47k	1/16W
R22	NRSA63J-0R0X	M.G.RESISTOR	0	1/16W
R23	NRSA63J-103X	M.G.RESISTOR	10k	1/16W
R24	NRSA63J-0R0X	M.G.RESISTOR	0	1/16W
R25	NRSA63D-104X	M.G.RESISTOR	100k	1/16W
R26	NRSA63D-153X	M.G.RESISTOR	15k	1/16W
R27	NRSA63D-223X	M.G.RESISTOR	22k	1/16W
R28	NRSA63D-103X	M.G.RESISTOR	10k	1/16W
R29	NRSA63D-153X	M.G.RESISTOR	15k	1/16W
R30	NRSA63D-153X	M.G.RESISTOR	15k	1/16W
R31	NRSA63D-223X	M.G.RESISTOR	22k	1/16W
R32	NRSA63D-912X	M.G.RESISTOR	9.1k	1/16W
R33	NRSA63D-563X	M.G.RESISTOR	56k	1/16W
R34	NRSA63J-104X	M.G.RESISTOR	100k	1/16W
R35	NRSA63J-223X	M.G.RESISTOR	22k	1/16W
R37	NRZ0070-R033X	CHIP RESISTOR	R03k	
R38	NRZ0070-R033X	CHIP RESISTOR	R03k	
R39	NRZ0070-R022X	M.G.RESISTOR	R0.2k	
R40	NRSA63J-0R0X	M.G.RESISTOR	0	1/16W
R41	NRSA63J-0R0X	M.G.RESISTOR	0	1/16W
R42	NRSA63D-154X	M.G.RESISTOR	150k	1/16W
R43	NRSA63D-683X	M.G.RESISTOR	68k	1/16W
R44	NRSA63D-103X	M.G.RESISTOR	10k	1/16W
R45	NRSA63D-104X	M.G.RESISTOR	100k	1/16W
R46	NRSA63J-562X	M.G.RESISTOR	5.6k	1/16W
R47	NRSA63D-202X	M.G.RESISTOR	2k	1/16W
R48	NRSA63D-223X	M.G.RESISTOR	22k	1/16W
R49	NRSA63D-104X	M.G.RESISTOR	100k	1/16W
R50	NRSA63D-274X	M.G.RESISTOR	270k	1/16W
R51	NRSA63D-473X	M.G.RESISTOR	47k	1/16W
R52	NRSA63D-103X	M.G.RESISTOR	10k	1/16W
R53	NRSA63D-124X	M.G.RESISTOR	120k	1/16W
R54	NRSA63J-222X	M.G.RESISTOR	2.2k	1/16W
R55	NRSA63D-103X	M.G.RESISTOR	10k	1/16W
R56	NRSA63D-682X	M.G.RESISTOR	6.8k	1/16W
R57	NRSA63J-0R0X	M.G.RESISTOR	0	1/16W
R58	NRSA63D-122X	M.G.RESISTOR	1.2k	1/16W
R59	NRSA63J-222X	M.G.RESISTOR	2.2k	1/16W
R60	NRSA63D-123X	M.G.RESISTOR	12k	1/16W
R61	NRSA63J-0R0X	M.G.RESISTOR	0	1/16W
R62	NRSA63D-152X	M.G.RESISTOR	1.5k	1/16W
R63	NRSA63D-153X	M.G.RESISTOR	15k	1/16W
R64	NRSA63D-104X	M.G.RESISTOR	100k	1/16W
R65	NRSA63D-394X	M.G.RESISTOR	390k	1/16W
R66	NRSA63D-104X	M.G.RESISTOR	100k	1/16W
R67	NRSA63D-184X	M.G.RESISTOR	180k	1/16W
R68	NRSA63D-154X	M.G.RESISTOR	150k	1/16W
R69	NRSA63D-683X	M.G.RESISTOR	68k	1/16W
R70	NRSA63D-204X	M.G.RESISTOR	200k	1/16W
R71	NRSA63D-103X	M.G.RESISTOR	10k	1/16W
R72	NRSA63D-122X	M.G.RESISTOR	1.2k	1/16W
R73	NRSA63J-562X	M.G.RESISTOR	5.6k	1/16W
R74	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R75	NRSA63D-104X	M.G.RESISTOR	100k	1/16W
R76	NRSA63D-104X	M.G.RESISTOR	100k	1/16W
R78	NRSA63J-0R0X	M.G.RESISTOR	0	1/16W
R79	NRSA63D-104X	M.G.RESISTOR	100k	1/16W
R80	NRSA63D-104X	M.G.RESISTOR	100k	1/16W
R81	NRSA63D-102X	M.G.RESISTOR	1k	1/16W
R82	NRSA63D-331X	M.G.RESISTOR	330	1/16W
R83	NRSA63J-562X	M.G.RESISTOR	5.6k	1/16W
R84	NRSA63D-473X	M.G.RESISTOR	47k	1/16W
R85	NRSA63D-154X	M.G.RESISTOR	150k	1/16W
R86	NRSA63D-393X	M.G.RESISTOR	39k	1/16W
R87	NRSA63D-563X	M.G.RESISTOR	56k	1/16W
R88	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R89	NRSA63J-274X	M.G.RESISTOR	270k	1/16W
R90	NRSA63D-202X	M.G.RESISTOR	2k	1/16W
R91	NRSA63D-103X	M.G.RESISTOR	10k	1/16W
R92	NRSA63J-123X	M.G.RESISTOR	12k	1/16W

Symbol No.	Part No.	Part Name	Description
R93	NRSA63J-334X	M.G.RESISTOR	330k 1/16W
R94	NRSA63J-104X	M.G.RESISTOR	100k 1/16W
R95	NRSA63J-101X	M.G.RESISTOR	100 1/16W
R96	NRSA63J-271X	M.G.RESISTOR	270 1/16W
R98	NRSA63J-681X	M.G.RESISTOR	680 1/16W
R99	NRSA63D-683X	M.G.RESISTOR	68k 1/16W
R100	NRSA63D-204X	M.G.RESISTOR	200k 1/16W
R101	NRSA63J-330X	M.G.RESISTOR	33 1/16W
R102	NRSA63J-330X	M.G.RESISTOR	33 1/16W
R103	NRSA63J-330X	M.G.RESISTOR	33 1/16W
R104	NRSA63J-330X	M.G.RESISTOR	33 1/16W
R105	NRSA63D-104X	M.G.RESISTOR	100k 1/16W
R107	NRSA63J-473X	M.G.RESISTOR	47k 1/16W
R108	NRSA63J-104X	M.G.RESISTOR	100k 1/16W
R109	NRSA63J-334X	M.G.RESISTOR	330k 1/16W
R110	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R111	NRSA63J-104X	M.G.RESISTOR	100k 1/16W
C1	NCJ11EK-106X-R	CER.CAPACITOR	10 25V
C2	NCB31AK-105X	CER.CAPACITOR	1 10V
C3	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C4	NCB31HK-103X	CER.CAPACITOR	0.01 50V
C5	NCB31HK-103X	CER.CAPACITOR	0.01 50V
C6	NCB31AK-105X	CER.CAPACITOR	1 10V
C8	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C9	NCB31HK-103X	CER.CAPACITOR	0.01 50V
C10	NCB31HK-103X	CER.CAPACITOR	0.01 50V
C11	NCB31AK-154X	CER.CAPACITOR	0.15 10V
C12	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C13	NCB31HK-102X	CER.CAPACITOR	1000p 50V
C14	NCB31HK-103X	CER.CAPACITOR	0.01 50V
C15	NCB31HK-102X	CER.CAPACITOR	1000p 50V
C16	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C17	NDC31HJ-221X	CER.CAPACITOR	220p 50V
C18	NDC31HJ-330X	CER.CAPACITOR	33p 50V
C19	NDC31HJ-221X	CER.CAPACITOR	220p 50V
C20	NDC31HJ-330X	CER.CAPACITOR	33p 50V
C22	NCB31HK-102X	CER.CAPACITOR	1000p 50V
C23	NCB31HK-222X	CER.CAPACITOR	2200p 50V
C24	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C25	NCB11AK-475X	CER.CAPACITOR	4.7 10V
C26	NCJ11EK-106X-R	CER.CAPACITOR	10 25V
C27	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C28	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C29	NCB31HK-102X	CER.CAPACITOR	1000p 50V
C31	NBZ0010-396X	TAN.CAPACITOR	39
C32	NCJ11EK-106X-R	CER.CAPACITOR	10 25V
C33	NBS40JM-686X	TAN.CAPACITOR	68 6.3V
C34	NCJ11EK-106X-R	CER.CAPACITOR	10 25V
C35	NBJG0JM-107X	TAN.CAPACITOR	100 6.3V
C36	NCB31CK-473X	CER.CAPACITOR	0.047 16V
C37	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C38	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C39	NDC31HJ-391X	CER.CAPACITOR	390p 50V
C40	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C41	NDC31HJ-391X	CER.CAPACITOR	390p 50V
C42	NDC31HG-331X	CER.CAPACITOR	330p 50V
C43	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C44	NCJ11EK-106X-R	CER.CAPACITOR	10 25V
C45	NBE21CM-475X	TAN.CAPACITOR	4.7 16V
C46	NBE21AM-106X	TAN.CAPACITOR	10 10V
C47	NCB31HK-103X	CER.CAPACITOR	0.01 50V
C48	NDC31HJ-680X	CER.CAPACITOR	68p 50V
C49	NCB31HK-103X	CER.CAPACITOR	0.01 50V
C50	NDC31HJ-5R0X	CER.CAPACITOR	5p 50V
C51	NCB11EK-105X	CER.CAPACITOR	1 25V
C52	NCJ11EK-106X-R	CER.CAPACITOR	10 25V
C53	NCB11EK-105X	CER.CAPACITOR	1 25V
C54	NCJ11EK-106X-R	CER.CAPACITOR	10 25V
C55	NCJ11EK-106X-R	CER.CAPACITOR	10 25V
C56	NCJ11EK-106X-R	CER.CAPACITOR	10 25V
C57	NCB11EK-105X	CER.CAPACITOR	1 25V

Symbol No.	Part No.	Part Name	Description
C58	NCB31HK-103X	CER.CAPACITOR	0.01 50V
C59	NDC31HJ-101X	CER.CAPACITOR	100p 50V
C60	NCB31AK-105X	CER.CAPACITOR	1 10V
C61	NCB11EK-105X	CER.CAPACITOR	1 25V
C62	NCB41HK-105X	CER.CAPACITOR	1 50V
C63	NCB41HK-105X	CER.CAPACITOR	1 50V
C64	NCB11HK-224X	CER.CAPACITOR	0.22 50V
C65	NCB11HK-224X	CER.CAPACITOR	0.22 50V
C66	NCJ11EK-106X-R	CER.CAPACITOR	10 25V
C67	NCJ11EK-106X-R	CER.CAPACITOR	10 25V
C68	NCJ11EK-106X-R	CER.CAPACITOR	10 25V
C69	NCJ11EK-106X-R	CER.CAPACITOR	10 25V
C70	NCJ11EK-106X-R	CER.CAPACITOR	10 25V
C71	NCB11EK-105X	CER.CAPACITOR	1 25V
C72	NCB11AK-475X	CER.CAPACITOR	4.7 10V
C73	NCB11EK-105X	CER.CAPACITOR	1 25V
C74	NCB11AK-475X	CER.CAPACITOR	4.7 10V
C75	NRSA63J-0R0X	M.G.RESISTOR	0p
C76	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C77	NCB31CK-473X	CER.CAPACITOR	0.047 16V
C78	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C79	NCB31AK-105X	CER.CAPACITOR	1 10V
C80	NCB31AK-105X	CER.CAPACITOR	1 10V
C81	NCB31CK-104X	CER.CAPACITOR	0.1 16V
L1	NQLC2EM-1R0X	COIL	1uH
L2	NQLC2EM-3R3X	COIL	3.3uH
L3	NQL52EM-6R8X	COIL	6.8uH
L4	NQL89EM-100X	COIL	10uH
L5	NQL89EM-220X	COIL	22uH
L6	NQL114K-220X	COIL	22uH
L7	NQL114K-220X	COIL	22uH
L8	NQL89EM-100X	COIL	10uH
L9	NQL89EM-100X	COIL	10uH
L11	NQL114K-220X	COIL	22uH
⚠TH1	NAD0039-002X	THERMISTOR	
⚠TH2	NAD0039-001X	THERMISTOR	
⚠F1	NMFZ020-3R15X-S	FUSE	3.15A
CN1	QGA1201C2-03X	CONNECTOR	3PIN
CN29	QGA1201F2-11X	CONNECTOR	11PIN
CN30	QGF0534F1-20X	CONNECTOR	20PIN
CN53	QGA1201C2-04X	CONNECTOR	4PIN
CN75	QGA1002C1-07X	CONNECTOR	7PIN
T1	NQR0580-001X	D/D CON TRANS	
T2	NQR0581-001X	D/D CON TRANS	
K1	NQR0351-001X	FERRITE BEADS	
K2	NQR0351-001X	FERRITE BEADS	
K3	NQR0448-001X	FERRITE BEADS	
K4	NQR0448-001X	FERRITE BEADS	
K5	NQR0448-001X	FERRITE BEADS	
K6	NQR0448-001X	FERRITE BEADS	
K7	NQR0448-001X	FERRITE BEADS	
K8	NQR0448-001X	FERRITE BEADS	
K9	NQR0448-001X	FERRITE BEADS	
K10	NQR0448-001X	FERRITE BEADS	
K11	NQR0448-001X	FERRITE BEADS	
K12	NQR0448-001X	FERRITE BEADS	
K13	NQR0448-001X	FERRITE BEADS	
K14	NQR0448-001X	FERRITE BEADS	
K15	NQR0265-003X	FERRITE BEADS	
K16	NQR0448-001X	FERRITE BEADS	
K17	NQR0265-003X	FERRITE BEADS	
VA1	NAF0008-171X	VARISTOR	

6.8 AUDIO BOARD ASSEMBLY PARTS LIST 3 0

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Symbol No.	Part No.	Part Name	Description	
IC201	BA3314F-X	I.C.(M)	ROHM	
IC202	BA3314F-X	I.C.(M)	ROHM	
IC203	TC4053BFT-X	I.C.(M)	TOSHIBA	
IC204	NJM2068V-X	I.C.(M)	JRC	
IC205	TC4053BFT-X	I.C.(M)	TOSHIBA	
IC206	NJM2068V-X	I.C.(M)	JRC	
IC207	NJM2068V-X	I.C.(M)	JRC	
IC208	NJM2068V-X	I.C.(M)	JRC	
IC209	BA6138F-X	I.C.(M)	ROHM	
IC210	TC4W53FU-X	I.C.(M)	TOSHIBA	
IC211	NJM2777V-X	I.C.(M)	JRC	
IC212	NJM78L05UA-X	I.C.(M)	JRC	
Q201	DTC144EUA-X	TRANSISTOR	ROHM	
Q202	DTC144EUA-X	TRANSISTOR	ROHM	
Q203	DTC144EUA-X	TRANSISTOR	ROHM	
Q204	DTC144EUA-X	TRANSISTOR	ROHM	
Q205	2SC3326/AB/-X	TRANSISTOR	TOSHIBA	
Q206	2SC3326/AB/-X	TRANSISTOR	TOSHIBA	
Q207	2SC3326/AB/-X	TRANSISTOR	TOSHIBA	
Q208	2SC3326/AB/-X	TRANSISTOR	TOSHIBA	
Q209	DTC144EUA-X	TRANSISTOR	ROHM	
Q210	DTC144EUA-X	TRANSISTOR	ROHM	
Q211	2SC3326/AB/-X	TRANSISTOR	TOSHIBA	
Q212	2SC3326/AB/-X	TRANSISTOR	TOSHIBA	
Q213	DTC144EUA-X	TRANSISTOR	ROHM	
Q214	DTC144EUA-X	TRANSISTOR	ROHM	
Q215	2SA1790J/BC/-X	TRANSISTOR	MATSUSHITA	
Q216	DTA114EUA-X	TRANSISTOR	ROHM	
Q217	2SC3326/AB/-X	TRANSISTOR	TOSHIBA	
Q218	2SC3326/AB/-X	TRANSISTOR	TOSHIBA	
Q219	DTA114EUA-X	TRANSISTOR	ROHM	
D205	MA143A-X	DIODE	MATSUSHITA	
D206	MA142WK-X	DIODE	MATSUSHITA	
D209	MA142WK-X	DIODE	MATSUSHITA	
R201	NRSA63J-103X	M.G.RESISTOR	10k	1/16W
R202	NRSA63J-103X	M.G.RESISTOR	10k	1/16W
R203	NRSA63J-392X	M.G.RESISTOR	3.9k	1/16W
R204	NRSA63J-392X	M.G.RESISTOR	3.9k	1/16W
R205	NRSA63J-0R0X	M.G.RESISTOR	0	1/16W
R206	NRSA63J-0R0X	M.G.RESISTOR	0	1/16W
R207	NRSA63J-562X	M.G.RESISTOR	5.6k	1/16W
R208	NRSA63J-562X	M.G.RESISTOR	5.6k	1/16W
R211	NRSA63J-101X	M.G.RESISTOR	100	1/16W
R212	NRSA63J-103X	M.G.RESISTOR	10k	1/16W
R213	NRSA63J-101X	M.G.RESISTOR	100	1/16W
R214	NRSA63J-103X	M.G.RESISTOR	10k	1/16W
R215	NRSA63J-105X	M.G.RESISTOR	1M	1/16W
R216	NRSA63J-105X	M.G.RESISTOR	1M	1/16W
R217	NRSA63J-153X	M.G.RESISTOR	15k	1/16W
R218	NRSA63J-153X	M.G.RESISTOR	15k	1/16W
R219	NRSA63J-152X	M.G.RESISTOR	1.5k	1/16W
R220	NRSA63J-152X	M.G.RESISTOR	1.5k	1/16W
R221	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R222	NRSA63J-0R0X	M.G.RESISTOR	0	1/16W
R223	NRSA63J-224X	M.G.RESISTOR	220k	1/16W
R224	NRSA63J-224X	M.G.RESISTOR	220k	1/16W
R225	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R226	NRSA63J-113X	M.G.RESISTOR	11k	1/16W
R227	NRSA63J-113X	M.G.RESISTOR	11k	1/16W
R228	NRSA63J-913X	M.G.RESISTOR	91k	1/16W
R229	NRSA63J-913X	M.G.RESISTOR	91k	1/16W
R230	NRSA63J-912X	M.G.RESISTOR	9.1k	1/16W
R231	NRSA63J-103X	M.G.RESISTOR	10k	1/16W
R232	NRSA63J-510X	M.G.RESISTOR	51	1/16W
R233	NRSA63J-510X	M.G.RESISTOR	51	1/16W
R234	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R235	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R236	NRSA63J-224X	M.G.RESISTOR	220k	1/16W
R237	NRSA63J-224X	M.G.RESISTOR	220k	1/16W

Symbol No.	Part No.	Part Name	Description	
R238	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R242	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R243	NRSA63J-102X	M.G.RESISTOR	1k	1/16W
R244	NRSA63J-102X	M.G.RESISTOR	1k	1/16W
R245	NRSA63J-182X	M.G.RESISTOR	1.8k	1/16W
R246	NRSA63J-102X	M.G.RESISTOR	1k	1/16W
R247	NRSA63J-102X	M.G.RESISTOR	1k	1/16W
R248	NRSA63J-182X	M.G.RESISTOR	1.8k	1/16W
R249	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R250	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R251	NRSA63J-102X	M.G.RESISTOR	1k	1/16W
R252	NRSA63J-822X	M.G.RESISTOR	8.2k	1/16W
R253	NRSA63J-822X	M.G.RESISTOR	8.2k	1/16W
R254	NRSA63J-123X	M.G.RESISTOR	12k	1/16W
R255	NRSA63J-123X	M.G.RESISTOR	12k	1/16W
R256	NRSA63J-123X	M.G.RESISTOR	12k	1/16W
R257	NRSA63J-123X	M.G.RESISTOR	12k	1/16W
R258	NRSA63J-152X	M.G.RESISTOR	1.5k	1/16W
R259	NRSA63J-152X	M.G.RESISTOR	1.5k	1/16W
R260	NRSA63J-242X	M.G.RESISTOR	2.4k	1/16W
R261	NRSA63J-242X	M.G.RESISTOR	2.4k	1/16W
R262	NRSA63J-102X	M.G.RESISTOR	1k	1/16W
R263	NRSA63J-272X	M.G.RESISTOR	2.7k	1/16W
R264	NRSA63J-272X	M.G.RESISTOR	2.7k	1/16W
R265	NRSA63J-472X	M.G.RESISTOR	4.7k	1/16W
R266	NRSA63J-472X	M.G.RESISTOR	4.7k	1/16W
R267	NRSA63J-562X	M.G.RESISTOR	5.6k	1/16W
R268	NRSA63J-562X	M.G.RESISTOR	5.6k	1/16W
R269	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R270	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R271	NRSA63J-102X	M.G.RESISTOR	1k	1/16W
R272	NRSA63J-102X	M.G.RESISTOR	1k	1/16W
R273	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R274	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R275	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R276	NRSA63J-0R0X	M.G.RESISTOR	0	1/16W
R277	NRSA63J-0R0X	M.G.RESISTOR	0	1/16W
R278	NRSA63J-102X	M.G.RESISTOR	1k	1/16W
R279	NRSA63J-102X	M.G.RESISTOR	1k	1/16W
R280	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R281	NRSA63J-223X	M.G.RESISTOR	22k	1/16W
R282	NRSA63J-0R0X	M.G.RESISTOR	0	1/16W
R283	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R284	NRSA63J-154X	M.G.RESISTOR	150k	1/16W
R285	NRSA63J-154X	M.G.RESISTOR	150k	1/16W
R286	NRSA63J-472X	M.G.RESISTOR	4.7k	1/16W
R287	NRSA63J-472X	M.G.RESISTOR	4.7k	1/16W
R288	NRSA63J-222X	M.G.RESISTOR	2.2k	1/16W
R289	NRSA63J-222X	M.G.RESISTOR	2.2k	1/16W
R290	NRSA63J-104X	M.G.RESISTOR	100k	1/16W
R291	NRSA63J-104X	M.G.RESISTOR	100k	1/16W
R292	NRSA63J-104X	M.G.RESISTOR	100k	1/16W
R293	NRSA63J-152X	M.G.RESISTOR	1.5k	1/16W
R294	NRSA63J-152X	M.G.RESISTOR	1.5k	1/16W
R295	NRSA63J-153X	M.G.RESISTOR	15k	1/16W
R296	NRSA63J-332X	M.G.RESISTOR	3.3k	1/16W
R297	NRSA63J-332X	M.G.RESISTOR	3.3k	1/16W
R298	NRSA63J-332X	M.G.RESISTOR	3.3k	1/16W
R299	NRSA63J-153X	M.G.RESISTOR	15k	1/16W
R300	NRSA63J-332X	M.G.RESISTOR	3.3k	1/16W
R301	NRSA63J-104X	M.G.RESISTOR	100k	1/16W
R302	NRSA63J-104X	M.G.RESISTOR	100k	1/16W
R303	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R304	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R305	NRSA63J-223X	M.G.RESISTOR	22k	1/16W
R306	NRSA63J-223X	M.G.RESISTOR	22k	1/16W
R307	NRSA63J-223X	M.G.RESISTOR	22k	1/16W
R308	NRSA63J-223X	M.G.RESISTOR	22k	1/16W
R309	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R310	NRSA63J-473X	M.G.RESISTOR	47k	1/16W
R312	NRSA63J-100X	M.G.RESISTOR	10	1/16W
R313	NRSA63J-100X	M.G.RESISTOR	10	1/16W
R314	NRSA63J-472X	M.G.RESISTOR	4.7k	1/16W

Symbol No.	Part No.	Part Name	Description
R315	NRSA63J-472X	M.G.RESISTOR	4.7k 1/16W
R322	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R323	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R324	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R326	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R327	NRSA63J-102X	M.G.RESISTOR	1k 1/16W
R328	NRSA63J-102X	M.G.RESISTOR	1k 1/16W
R329	NRSA63J-563X	M.G.RESISTOR	56k 1/16W
R330	NRSA63J-563X	M.G.RESISTOR	56k 1/16W
R331	NRSA63J-473X	M.G.RESISTOR	47k 1/16W
R333	NRSA63J-102X	M.G.RESISTOR	1k 1/16W
R334	NRSA63J-102X	M.G.RESISTOR	1k 1/16W
R335	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R336	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R337	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R338	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
C203	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C204	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C205	NCB41CM-106X	CER.CAPACITOR	10 16V
C206	NCB41CM-106X	CER.CAPACITOR	10 16V
C207	NCB41CM-106X	CER.CAPACITOR	10 16V
C208	NCB41CM-106X	CER.CAPACITOR	10 16V
C209	NCB11CK-105X	CER.CAPACITOR	1 16V
C210	NCB11CK-105X	CER.CAPACITOR	1 16V
C211	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C212	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C213	NEHM1CM-106X	E.CAPACITOR	10 16V
C214	NEHM1CM-106X	E.CAPACITOR	10 16V
C216	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C217	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C218	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C219	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C220	NCB11CK-224X	CER.CAPACITOR	0.22 16V
C221	NCB11CK-224X	CER.CAPACITOR	0.22 16V
C222	NEHM0JM-476X	E.CAPACITOR	47 6.3V
C223	NDC31HJ-100X	CER.CAPACITOR	10p 50V
C224	NDC31HJ-100X	CER.CAPACITOR	10p 50V
C225	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C226	NEHM1HM-474X	E.CAPACITOR	0.47 50V
C227	NEHM1HM-474X	E.CAPACITOR	0.47 50V
C228	NEHM1CM-106X	E.CAPACITOR	10 16V
C229	NEHM1CM-106X	E.CAPACITOR	10 16V
C230	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C231	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C232	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C233	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C234	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C235	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C236	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C237	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C238	NCB31HK-222X	CER.CAPACITOR	2200p 50V
C239	NCB31HK-222X	CER.CAPACITOR	2200p 50V
C240	NCB31HK-222X	CER.CAPACITOR	2200p 50V
C241	NCB31HK-222X	CER.CAPACITOR	2200p 50V
C242	NDC31HJ-221X	CER.CAPACITOR	220p 50V
C243	NDC31HJ-221X	CER.CAPACITOR	220p 50V
C244	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C245	NDC31HJ-100X	CER.CAPACITOR	10p 50V
C246	NDC31HJ-100X	CER.CAPACITOR	10p 50V
C247	NDC31HJ-100X	CER.CAPACITOR	10p 50V
C248	NDC31HJ-100X	CER.CAPACITOR	10p 50V
C249	NCB31HK-222X	CER.CAPACITOR	2200p 50V
C250	NCB31HK-222X	CER.CAPACITOR	2200p 50V
C251	NDC31HJ-101X	CER.CAPACITOR	100p 50V
C252	NDC31HJ-101X	CER.CAPACITOR	100p 50V
C253	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C254	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C255	NEHM1HM-474X	E.CAPACITOR	0.47 50V
C256	NEHM1HM-474X	E.CAPACITOR	0.47 50V
C257	NEHM1CM-106X	E.CAPACITOR	10 16V
C258	NEHM1CM-106X	E.CAPACITOR	10 16V

Symbol No.	Part No.	Part Name	Description
C259	NEHM1CM-106X	E.CAPACITOR	10 16V
C260	NEHM1CM-106X	E.CAPACITOR	10 16V
C261	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C262	NCB11CK-475X	CER.CAPACITOR	4.7 16V
C263	NCB11CK-475X	CER.CAPACITOR	4.7 16V
C264	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C265	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C266	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C269	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C270	NCB11CK-105X	CER.CAPACITOR	1 16V
C271	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C272	NCB11CK-105X	CER.CAPACITOR	1 16V
C273	NCB11CK-105X	CER.CAPACITOR	1 16V
C274	NCB11CK-105X	CER.CAPACITOR	1 16V
C275	NCB11CK-105X	CER.CAPACITOR	1 16V
C276	NCB11CK-105X	CER.CAPACITOR	1 16V
C277	NCB11CK-105X	CER.CAPACITOR	1 16V
C278	NEHM0JM-226X	E.CAPACITOR	22 6.3V
C279	NCB11CK-105X	CER.CAPACITOR	1 16V
C280	NEHM1CM-106X	E.CAPACITOR	10 16V
C281	NEHM1CM-106X	E.CAPACITOR	10 16V
C282	NEHM1CM-476X	E.CAPACITOR	47 16V
C283	NEHM1CM-476X	E.CAPACITOR	47 16V
C284	NEHM1CM-106X	E.CAPACITOR	10 16V
C286	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C287	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C288	NEHM1CM-226X	E.CAPACITOR	22 16V
C289	NEHM1CM-226X	E.CAPACITOR	22 16V
C290	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C291	NCB41CM-106X	CER.CAPACITOR	10 16V
C292	NEHM1CM-106X	E.CAPACITOR	10 16V
C293	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C294	NCB20JK-475X	CER.CAPACITOR	4.7 6.3V
C295	NCB20JK-475X	CER.CAPACITOR	4.7 6.3V
L201	NQL904J-100X	COIL	10uH
L202	NQL904J-100X	COIL	10uH
L203	NQL904J-100X	COIL	10uH
S201	NSW0180-001X	DETECT SWITCH	LCD ON/OFF
S202	NSW0070-001X	SLIDE SWITCH	A.SELECT CH1
S203	NSW0070-001X	SLIDE SWITCH	A.SELECT CH2
S204	NSW0070-001X	SLIDE SWITCH	DISPLAY
S205	NSW0070-002X	SLIDE SWITCH	GENE.
S206	NSW0010-001X	SWITCH	LCD BRIGHT -
S207	NSW0010-001X	SWITCH	LCD BRIGHT +
S208	NSW0010-001X	SWITCH	CAM/VTR
CN14	QGF0508F1-50X	CONNECTOR	50PIN
CN24	QGF0508F1-50X	CONNECTOR	50PIN
CN43	QGA1002F1-09X	CONNECTOR	9PIN
CN44	QGF0534F1-18X	CONNECTOR	18PIN
CN45	QGF0534F1-18X	CONNECTOR	18PIN
CN62	QGF0305F1-33X	CONNECTOR	3PIN
K201	NQR0413-002X	FERRITE CORE	

6.9 LINSEL BOARD ASSEMBLY PARTS LIST 3 1

CK279400A2 3 1 ☐☐☐☐☐☐

Symbol No.	Part No.	Part Name	Description
IC1	TC4053BFT-X	I.C.(M)	TOSHIBA
IC2	TC4053BFT-X	I.C.(M)	TOSHIBA
IC3	NJM2068V-X	I.C.(M)	JRC
IC4	NJM2068V-X	I.C.(M)	JRC
IC5	NJM2068V-X	I.C.(M)	JRC
IC6	TC4052BFT/N/-X	I.C.(M)	TOSHIBA
IC7	TC4052BFT/N/-X	I.C.(M)	TOSHIBA
IC8	NJM2068V-X	I.C.(M)	JRC
IC9	TC4052BFT/N/-X	I.C.(M)	TOSHIBA
IC10	TC4052BFT/N/-X	I.C.(M)	TOSHIBA
Q1	DTC144EUA-X	TRANSISTOR	ROHM
Q2	DTC144EUA-X	TRANSISTOR	ROHM
Q3	DTC144EUA-X	TRANSISTOR	ROHM
Q4	DTC144EUA-X	TRANSISTOR	ROHM
Q5	DTC144EUA-X	TRANSISTOR	ROHM
Q6	DTC144EUA-X	TRANSISTOR	ROHM
Q7	DTC144EUA-X	TRANSISTOR	ROHM
Q8	DTC144EUA-X	TRANSISTOR	ROHM
Q9	2SK1062-X	FET	TOSHIBA
Q10	2SK1062-X	FET	TOSHIBA
Q11	DTC124EUA-X	TRANSISTOR	ROHM
Q12	DTC124EUA-X	TRANSISTOR	ROHM
Q13	DTC124EUA-X	TRANSISTOR	ROHM
Q14	DTC124EUA-X	TRANSISTOR	ROHM
Q15	DTC124EUA-X	TRANSISTOR	ROHM
Q16	2SC3326/AB/-X	TRANSISTOR	TOSHIBA
Q17	2SB1463J/S/-X	TRANSISTOR	MATSUSHITA
Q18	2SB1463J/S/-X	TRANSISTOR	MATSUSHITA
Q19	2SD2240J/R/-X	TRANSISTOR	MATSUSHITA
Q20	DTA114EUA-X	TRANSISTOR	ROHM
D1	MA143A-X	DIODE	MATSUSHITA
D2	MA143A-X	DIODE	MATSUSHITA
D3	MA143A-X	DIODE	MATSUSHITA
D4	MA143A-X	DIODE	MATSUSHITA
R1	NRSA63D-103X	M.G.RESISTOR	10k 1/16W
R2	NRSA63D-103X	M.G.RESISTOR	10k 1/16W
R3	NRSA63D-103X	M.G.RESISTOR	10k 1/16W
R4	NRSA63D-103X	M.G.RESISTOR	10k 1/16W
R5	NRSA63D-103X	M.G.RESISTOR	10k 1/16W
R6	NRSA63D-103X	M.G.RESISTOR	10k 1/16W
R7	NRSA63D-103X	M.G.RESISTOR	10k 1/16W
R8	NRSA63D-103X	M.G.RESISTOR	10k 1/16W
R9	NRSA63D-113X	M.G.RESISTOR	11k 1/16W
R10	NRSA63D-153X	M.G.RESISTOR	15k 1/16W
R11	NRSA63D-153X	M.G.RESISTOR	15k 1/16W
R12	NRSA63D-153X	M.G.RESISTOR	15k 1/16W
R13	NRSA63D-113X	M.G.RESISTOR	11k 1/16W
R14	NRSA63D-113X	M.G.RESISTOR	11k 1/16W
R15	NRSA63D-113X	M.G.RESISTOR	11k 1/16W
R16	NRSA63D-153X	M.G.RESISTOR	15k 1/16W
R17	NRSA63J-473X	M.G.RESISTOR	47k 1/16W
R18	NRSA63J-473X	M.G.RESISTOR	47k 1/16W
R19	NRSA63J-473X	M.G.RESISTOR	47k 1/16W
R20	NRSA63J-473X	M.G.RESISTOR	47k 1/16W
R21	NRSA63J-473X	M.G.RESISTOR	47k 1/16W
R22	NRSA63J-473X	M.G.RESISTOR	47k 1/16W
R23	NRSA63J-473X	M.G.RESISTOR	47k 1/16W
R24	NRSA63J-473X	M.G.RESISTOR	47k 1/16W
R25	NRSA63D-104X	M.G.RESISTOR	100k 1/16W
R26	NRSA63D-104X	M.G.RESISTOR	100k 1/16W
R27	NRSA63D-104X	M.G.RESISTOR	100k 1/16W
R28	NRSA63D-104X	M.G.RESISTOR	100k 1/16W
R29	NRSA63J-331X	M.G.RESISTOR	330 1/16W
R30	NRSA63J-331X	M.G.RESISTOR	330 1/16W
R31	NRSA63J-221X	M.G.RESISTOR	220 1/16W
R32	NRSA63J-221X	M.G.RESISTOR	220 1/16W
R33	NRSA63J-221X	M.G.RESISTOR	220 1/16W
R34	NRSA63J-221X	M.G.RESISTOR	220 1/16W
R35	NRSA63J-104X	M.G.RESISTOR	100k 1/16W
R36	NRSA63J-104X	M.G.RESISTOR	100k 1/16W

Symbol No.	Part No.	Part Name	Description
R37	NRSA63J-274X	M.G.RESISTOR	270k 1/16W
R38	NRSA63J-274X	M.G.RESISTOR	270k 1/16W
R39	NRSA63J-274X	M.G.RESISTOR	270k 1/16W
R40	NRSA63J-274X	M.G.RESISTOR	270k 1/16W
R41	NRSA63J-274X	M.G.RESISTOR	270k 1/16W
R42	NRSA63J-274X	M.G.RESISTOR	270k 1/16W
R43	NRSA63D-682X	M.G.RESISTOR	6.8k 1/16W
R44	NRSA63D-682X	M.G.RESISTOR	6.8k 1/16W
R45	NRSA63D-682X	M.G.RESISTOR	6.8k 1/16W
R46	NRSA63D-682X	M.G.RESISTOR	6.8k 1/16W
R47	NRSA63D-243X	M.G.RESISTOR	24k 1/16W
R48	NRSA63D-243X	M.G.RESISTOR	24k 1/16W
R49	NRSA63D-243X	M.G.RESISTOR	24k 1/16W
R50	NRSA63D-243X	M.G.RESISTOR	24k 1/16W
R51	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R52	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R53	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R54	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R55	NRSA63D-361X	M.G.RESISTOR	360 1/16W
R56	NRSA63D-361X	M.G.RESISTOR	360 1/16W
R57	NRSA63D-361X	M.G.RESISTOR	360 1/16W
R58	NRSA63D-361X	M.G.RESISTOR	360 1/16W
R59	NRSA63J-272X	M.G.RESISTOR	2.7k 1/16W
R60	NRSA63J-272X	M.G.RESISTOR	2.7k 1/16W
R61	NRSA63D-222X	M.G.RESISTOR	2.2k 1/16W
R62	NRSA63D-222X	M.G.RESISTOR	2.2k 1/16W
R63	NRSA63D-222X	M.G.RESISTOR	2.2k 1/16W
R64	NRSA63D-222X	M.G.RESISTOR	2.2k 1/16W
R65	NRSA63J-473X	M.G.RESISTOR	47k 1/16W
R66	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R67	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R68	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R69	NRSA63J-473X	M.G.RESISTOR	47k 1/16W
R70	NRSA63J-224X	M.G.RESISTOR	220k 1/16W
R71	NRSA63J-432X	M.G.RESISTOR	4.3k 1/16W
R72	NRSA63J-224X	M.G.RESISTOR	220k 1/16W
R73	NRSA63J-224X	M.G.RESISTOR	220k 1/16W
R74	NRSA63J-224X	M.G.RESISTOR	220k 1/16W
R75	NRSA63J-105X	M.G.RESISTOR	1M 1/16W
R76	NRSA63J-105X	M.G.RESISTOR	1M 1/16W
R77	NRSA63J-912X	M.G.RESISTOR	9.1k 1/16W
R78	NRSA63J-102X	M.G.RESISTOR	1k 1/16W
R79	NRSA63J-102X	M.G.RESISTOR	1k 1/16W
R80	NRSA63J-153X	M.G.RESISTOR	15k 1/16W
R81	NRSA63J-153X	M.G.RESISTOR	15k 1/16W
R82	NRSA63J-473X	M.G.RESISTOR	47k 1/16W
R83	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R84	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R85	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R86	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
C1	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C2	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C3	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C5	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C6	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C7	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C8	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C9	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C10	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C12	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C13	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C14	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C15	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C16	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C17	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C18	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C19	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C20	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C21	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C22	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C23	NCB31CK-104X	CER.CAPACITOR	0.1 16V

Symbol No.	Part No.	Part Name	Description
C24	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C25	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C26	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C27	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C28	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C29	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C30	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C31	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C32	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C33	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C34	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C35	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C36	NFVC1CJ-104X	FILM CAPACITOR	0.1 16V
C37	NFVC1CJ-104X	FILM CAPACITOR	0.1 16V
C38	NFVC1CJ-104X	FILM CAPACITOR	0.1 16V
C39	NFVC1CJ-104X	FILM CAPACITOR	0.1 16V
C40	NDC31HJ-101X	CER.CAPACITOR	100p 50V
C41	NDC31HJ-101X	CER.CAPACITOR	100p 50V
C42	NDC31HJ-101X	CER.CAPACITOR	100p 50V
C43	NDC31HJ-101X	CER.CAPACITOR	100p 50V
C44	NDC31HJ-101X	CER.CAPACITOR	100p 50V
C45	NDC31HJ-101X	CER.CAPACITOR	100p 50V
C46	NDC31HJ-101X	CER.CAPACITOR	100p 50V
C47	NDC31HJ-101X	CER.CAPACITOR	100p 50V
C48	NDC31HJ-101X	CER.CAPACITOR	100p 50V
C49	NDC31HJ-101X	CER.CAPACITOR	100p 50V
C50	NDC31HJ-101X	CER.CAPACITOR	100p 50V
C51	NDC31HJ-101X	CER.CAPACITOR	100p 50V
C52	NDC31HJ-101X	CER.CAPACITOR	100p 50V
C53	NDC31HJ-101X	CER.CAPACITOR	100p 50V
C54	NDC31HJ-101X	CER.CAPACITOR	100p 50V
C55	NDC31HJ-101X	CER.CAPACITOR	100p 50V
C56	NCB41CM-106X	CER.CAPACITOR	10 16V
C57	NCB41CM-106X	CER.CAPACITOR	10 16V
C58	NCB41CM-106X	CER.CAPACITOR	10 16V
C59	NCB41CM-106X	CER.CAPACITOR	10 16V
C60	NCB11HK-223X	CER.CAPACITOR	0.022 50V
C61	NCB11HK-223X	CER.CAPACITOR	0.022 50V
C62	NCB11HK-223X	CER.CAPACITOR	0.022 50V
C63	NCB31HK-222X	CER.CAPACITOR	2200p 50V
C64	NCB31HK-222X	CER.CAPACITOR	2200p 50V
C65	NCB41CM-106X	CER.CAPACITOR	10 16V
C66	NCB41CM-106X	CER.CAPACITOR	10 16V
C67	NELA1JM-475X	E.CAPACITOR	4.7 63V
L1	NQL904J-100X	COIL	10uH
L2	NQL904J-100X	COIL	10uH
S1	NSW0070-002X	SLIDE SWITCH	AUDIO INPUT 1
S2	NSW0070-002X	SLIDE SWITCH	AUDIO INPUT 2
S3	NSW0070-001X	SLIDE SWITCH	CH2 INPUT
CN13	QGF0508F1-15X	CONNECTOR	15PIN
CN41	QGF0534F1-13X	CONNECTOR	13PIN
CN42	QGF0508F1-06X	CONNECTOR	6PIN
CN43	QGA1002C1-09X	CONNECTOR	9PIN

6.10 SD BOARD ASSEMBLY PARTS LIST 3 2

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Symbol No.	Part No.	Part Name	Description
Q1	DTA124EUA-X	TRANSISTOR	ROHM
Q2	DTA124EUA-X	TRANSISTOR	ROHM
R1	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R2	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R3	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R4	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R5	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R6	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R7	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R8	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R9	NRSA63J-220X	M.G.RESISTOR	22 1/16W
R10	NRSA63J-220X	M.G.RESISTOR	22 1/16W
R11	NRSA63J-220X	M.G.RESISTOR	22 1/16W
R12	NRSA63J-220X	M.G.RESISTOR	22 1/16W
C1	NCF31EZ-104X	CER.CAPACITOR	0.1 25V
C9	NBE21AM-106X	TAN.CAPACITOR	10 10V
J10	NNZ0135-001X	SD CARD CONNECTOR	
CN18	QGF0508F1-10X	CONNECTOR	10PIN
K1	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W

6.11 PRMDA BOARD ASSEMBLY PARTS LIST 3 3

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Symbol No.	Part No.	Part Name	Description
IC1	MM1572FN-X	I.C.(M)	MITSUMI
IC2	NJU7222U30-X	I.C.(M)	JRC
IC3	JCY0132	I.C.(M)	JVC
IC4	TC7SH00FU-X	I.C.(M)	TOSHIBA
IC6	BA6865KV	I.C.(M)	ROHM
Q4	2SC4081/QRS/-X	TRANSISTOR	ROHM
Q41	2SB1302/ST/-X	TRANSISTOR	SANYO
Q42	2SB1302/ST/-X	TRANSISTOR	SANYO
Q43	2SB1302/ST/-X	TRANSISTOR	SANYO
Q101	2SC3735/4-5/A-X	TRANSISTOR	NEC
Q103	2SC3735/4-5/A-X	TRANSISTOR	NEC
Q104	2SC3735/4-5/A-X	TRANSISTOR	NEC
QA41	BA6254FS-X	TRANSIST.ARRAY	
D41	DAP222-X	DIODE	ROHM
R1	NRSA63J-393X	M.G.RESISTOR	39k 1/16W
R2	NRSA63J-203X	M.G.RESISTOR	20k 1/16W
R3	NRSA63J-473X	M.G.RESISTOR	47k 1/16W
R4	NRSA63J-103X	M.G.RESISTOR	10k 1/16W
R5	NRSA63J-103X	M.G.RESISTOR	10k 1/16W
R6	NRSA63J-103X	M.G.RESISTOR	10k 1/16W
R7	NRSA63J-103X	M.G.RESISTOR	10k 1/16W
R11	NRSA63J-105X	M.G.RESISTOR	1M 1/16W

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Symbol No.	Part No.	Part Name	Description	
R12	NRSA63J-124X	M.G.RESISTOR	120k	1/16W
R13	NRSA63J-681X	M.G.RESISTOR	680	1/16W
R14	NRSA63J-472X	M.G.RESISTOR	4.7k	1/16W
R15	NRSA63J-104X	M.G.RESISTOR	100k	1/16W
R16	NRSA63J-511X	M.G.RESISTOR	510	1/16W
R17	NRSA63J-511X	M.G.RESISTOR	510	1/16W
R18	NRSA63J-511X	M.G.RESISTOR	510	1/16W
R19	NRSA63J-511X	M.G.RESISTOR	510	1/16W
R20	NRSA63J-223X	M.G.RESISTOR	22k	1/16W
R31	NRSA63J-474X	M.G.RESISTOR	470k	1/16W
R32	NRSA63J-202X	M.G.RESISTOR	2k	1/16W
R33	NRSA63J-154X	M.G.RESISTOR	150k	1/16W
R34	NRSA63J-274X	M.G.RESISTOR	270k	1/16W
R37	NRSA63J-102X	M.G.RESISTOR	1k	1/16W
R38	NRSA63J-102X	M.G.RESISTOR	1k	1/16W
R39	NRSA63J-272X	M.G.RESISTOR	2.7k	1/16W
R42	NRS12BK-R68W	M.G.RESISTOR	0.68	1/2W
R43	NRSA63J-472X	M.G.RESISTOR	4.7k	1/16W
R44	NRSA63J-0R0X	M.G.RESISTOR	0	1/16W
R45	NRSA63J-222X	M.G.RESISTOR	2.2k	1/16W
R46	NRSA63J-103X	M.G.RESISTOR	10k	1/16W
R47	NRSA63J-104X	M.G.RESISTOR	100k	1/16W
R48	NRSA63J-104X	M.G.RESISTOR	100k	1/16W
R50	NRSA63J-0R0X	M.G.RESISTOR	0	1/16W
R51	NRSA63J-1R0X	M.G.RESISTOR	1	1/16W
R52	NRSA63J-1R0X	M.G.RESISTOR	1	1/16W
R53	NRSA63J-1R0X	M.G.RESISTOR	1	1/16W
R54	NRSA63J-1R0X	M.G.RESISTOR	1	1/16W
R62	NRSA63J-153X	M.G.RESISTOR	15k	1/16W
R101	NRSA63J-333X	M.G.RESISTOR	33k	1/16W
R102	NRSA63J-153X	M.G.RESISTOR	15k	1/16W
R103	NRSA63J-471X	M.G.RESISTOR	470	1/16W
R104	NRSA63J-471X	M.G.RESISTOR	470	1/16W
R105	NRSA63D-122X	M.G.RESISTOR	1.2k	1/16W
R106	NRSA63J-333X	M.G.RESISTOR	33k	1/16W
R107	NRSA63J-471X	M.G.RESISTOR	470	1/16W
R108	NRSA63J-471X	M.G.RESISTOR	470	1/16W
R113	NRSA63D-221X	M.G.RESISTOR	220	1/16W
R114	NRSA63D-750X	M.G.RESISTOR	75	1/16W
R115	NRSA63J-102X	M.G.RESISTOR	1k	1/16W
R118	NRSA63J-560X	M.G.RESISTOR	56	1/16W
R125	NRSA63J-0R0X	M.G.RESISTOR	0	1/16W
R126	NRSA63J-101X	M.G.RESISTOR	100	1/16W
R127	NRSA63J-101X	M.G.RESISTOR	100	1/16W
R128	NRSA63J-101X	M.G.RESISTOR	100	1/16W
R129	NRSA63J-101X	M.G.RESISTOR	100	1/16W
R130	NRSA63J-101X	M.G.RESISTOR	100	1/16W
R131	NRSA63J-472X	M.G.RESISTOR	4.7k	1/16W
R132	NRSA63J-471X	M.G.RESISTOR	470	1/16W
R133	NRSA63J-223X	M.G.RESISTOR	22k	1/16W
R141	NRSA63J-101X	M.G.RESISTOR	100	1/16W
R142	NRSA63J-0R0X	M.G.RESISTOR	0	1/16W
R143	NRSA63J-0R0X	M.G.RESISTOR	0	1/16W
R144	NRSA63J-101X	M.G.RESISTOR	100	1/16W
R145	NRSA63J-101X	M.G.RESISTOR	100	1/16W
R146	NRSA63J-101X	M.G.RESISTOR	100	1/16W
R147	NRSA63J-101X	M.G.RESISTOR	100	1/16W
R151	NRSA63J-241X	M.G.RESISTOR	240	1/16W
R152	NRSA63J-241X	M.G.RESISTOR	240	1/16W
R153	NRSA63J-241X	M.G.RESISTOR	240	1/16W
R154	NRSA63J-241X	M.G.RESISTOR	240	1/16W
R161	NRSA63J-471X	M.G.RESISTOR	470	1/16W
R162	NRSA63J-102X	M.G.RESISTOR	1k	1/16W
R173	NRSA63D-560X	M.G.RESISTOR	56	1/16W
R174	NRSA63J-104X	M.G.RESISTOR	100k	1/16W
R203	NRSA63J-0R0X	M.G.RESISTOR	0	1/16W
R204	NRSA63J-0R0X	M.G.RESISTOR	0	1/16W
VR1	NVQ0006-B14X	VAL.RESISTOR	B10k	MODE SENS
C1	NCB31CK-104X	CER.CAPACITOR	0.1	16V

Symbol No.	Part No.	Part Name	Description	
C2	NCB31CK-473X	CER.CAPACITOR	0.047	16V
C3	NCB31CK-223X	CER.CAPACITOR	0.022	16V
C4	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C14	NBE21AM-106X	TAN.CAPACITOR	10	10V
C15	NBE41CM-106X	TAN.CAPACITOR	10	16V
C16	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C17	NCB31HK-152X	CER.CAPACITOR	1500p	50V
C18	NCB31HK-103X	CER.CAPACITOR	0.01	50V
C19	NCB31HK-103X	CER.CAPACITOR	0.01	50V
C20	NCB31HK-103X	CER.CAPACITOR	0.01	50V
C21	NCB31HK-103X	CER.CAPACITOR	0.01	50V
C22	NCB31HK-103X	CER.CAPACITOR	0.01	50V
C23	NCB31HK-103X	CER.CAPACITOR	0.01	50V
C24	NCB31HK-103X	CER.CAPACITOR	0.01	50V
C31	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C32	NBE41CM-226X	TAN.CAPACITOR	22	16V
C33	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C34	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C35	NCB31CK-223X	CER.CAPACITOR	0.022	16V
C36	NCB31CK-223X	CER.CAPACITOR	0.022	16V
C37	NCB31CK-223X	CER.CAPACITOR	0.022	16V
C39	NCB11CK-105X	CER.CAPACITOR	1	16V
C40	NCB31HK-103X	CER.CAPACITOR	0.01	50V
C41	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C42	NCB31AK-224X	CER.CAPACITOR	0.22	10V
C43	NCB31AK-224X	CER.CAPACITOR	0.22	10V
C44	NCB31AK-224X	CER.CAPACITOR	0.22	10V
C45	NBE41EM-475X	TAN.CAPACITOR	4.7	25V
C46	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C47	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C48	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C49	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C50	NBE41CM-226X	TAN.CAPACITOR	22	16V
C51	NDC31HJ-102X	CER.CAPACITOR	1000p	50V
C52	NCB11CK-105X	CER.CAPACITOR	1	16V
C53	NCB31CK-223X	CER.CAPACITOR	0.022	16V
C54	NCB31CK-223X	CER.CAPACITOR	0.022	16V
C101	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C102	NDC31HJ-100X	CER.CAPACITOR	10p	50V
C103	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C108	NDC31HJ-560X	CER.CAPACITOR	56p	50V
C109	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C110	NBE41CM-106X	TAN.CAPACITOR	10	16V
C111	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C112	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C131	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C132	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C133	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C134	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C135	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C136	NBE41CM-106X	TAN.CAPACITOR	10	16V
C137	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C138	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C140	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C141	NDC31HJ-221X	CER.CAPACITOR	220p	50V
C142	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C143	NDC31HJ-102X	CER.CAPACITOR	1000p	50V
C145	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C146	NCB11CK-475X	CER.CAPACITOR	4.7	16V
C147	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C148	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C149	NCB11CK-475X	CER.CAPACITOR	4.7	16V
C161	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C162	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C163	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C164	NCB31CK-223X	CER.CAPACITOR	0.022	16V
C165	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C166	NBE41CM-106X	TAN.CAPACITOR	10	16V
C167	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C168	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C171	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C172	NCB31CK-104X	CER.CAPACITOR	0.1	16V
C174	NCB31CK-104X	CER.CAPACITOR	0.1	16V

6.12 VF DR BOARD ASSEMBLY PARTS LIST 3 4

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Symbol No.	Part No.	Part Name	Description
C175	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C176	NBE21AM-106X	TAN.CAPACITOR	10 10V
C177	NBE21AM-106X	TAN.CAPACITOR	10 10V
C178	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C179	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C201	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C202	NBE41CM-106X	TAN.CAPACITOR	10 16V
C203	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C204	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C205	NBE41CM-106X	TAN.CAPACITOR	10 16V
C206	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C207	NBE21AM-106X	TAN.CAPACITOR	10 10V
C208	NCB31HK-103X	CER.CAPACITOR	0.01 50V
C209	NBE21AM-106X	TAN.CAPACITOR	10 10V
C210	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C211	NBE41CM-106X	TAN.CAPACITOR	10 16V
C212	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C213	NCB31HK-103X	CER.CAPACITOR	0.01 50V
C214	NBE41CM-106X	TAN.CAPACITOR	10 16V
C215	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C216	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C217	NBE21AM-106X	TAN.CAPACITOR	10 10V
C218	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C219	NBE21AM-106X	TAN.CAPACITOR	10 10V
C220	NCB31CK-104X	CER.CAPACITOR	0.1 16V
L50	NQLA3GK-100X	COIL	10uH
L101	NQL904J-R47X	COIL	0.47uH
L102	NQL904J-R47X	COIL	0.47uH
L103	NQLA3GK-100X	COIL	10uH
L131	NQLA3GK-100X	COIL	10uH
L161	NQLA3GK-100X	COIL	10uH
L171	NQLA3GK-100X	COIL	10uH
L172	NQLA3GK-100X	COIL	10uH
L201	NQLA3GK-100X	COIL	10uH
L202	NQLA3GK-100X	COIL	10uH
LC201	NQR0436-001X	LC FILTER	
TH1	NAD0002-223X	THERMISTOR	22k
S1	NSW0255-001X	LEVER SWITCH	HOUSING SWITCH
CN1	NNZ0071-001X	CONNECTOR	
CN2	NNZ0071-001X	CONNECTOR	
CN3	NNZ0071-001X	CONNECTOR	
CN16	QGF0508F1-50X	CONNECTOR	50PIN
CN17	QGF0508F1-16X	CONNECTOR	16PIN
CN70	QGF0508F1-18X	CONNECTOR	18PIN
CN71	QGF0503F4-13X	CONNECTOR	13PIN
CN72	QGA1201F2-02X	CONNECTOR	2PIN
CN73	QGF0503F3-08X	CONNECTOR	8PIN
CN74	QGF0508F2-15X	CONNECTOR	15PIN
CN75	QGA1002F1-07X	CONNECTOR	7PIN
CN77	QGA1201F2-02X	CONNECTOR	2PIN
CN102	NNZ0133-001X	CONNECTOR	
CN104	NNZ0133-001X	CONNECTOR	
TP201	NNZ0009-001X	TEST POINT	PRA+3V
TP202	NNZ0009-001X	TEST POINT	PRD+3V
TP203	NNZ0009-001X	TEST POINT	+2.5V
K50	NQR0200-005X	COIL	
K171	NQR0265-001X	FERAITE BEADS	
K201	NQR0200-005X	COIL	

Symbol No.	Part No.	Part Name	Description
IC1	CXM3005TQ	I.C.(M)	SONY
IC2	TK11100CSC-X	I.C.(M)	TOKO DENSHI
Q1	2SD601A/QR/-X	TRANSISTOR	MATSUSHITA
Q2	2SD601A/QR/-X	TRANSISTOR	MATSUSHITA
Q3	DTA124EUA-X	TRANSISTOR	ROHM
Q4	DTC124EUA-X	TRANSISTOR	ROHM
D1	HZM5.6NB2-X	ZENER DIODE	HITACHI
R1	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R8	NRSA63D-433X	M.G.RESISTOR	43k 1/16W
R9	NRSA63D-433X	M.G.RESISTOR	43k 1/16W
R10	NRSA63J-103X	M.G.RESISTOR	10k 1/16W
R11	NRSA63J-104X	M.G.RESISTOR	100k 1/16W
R12	NRSA63J-104X	M.G.RESISTOR	100k 1/16W
R13	NRSA63J-100X	M.G.RESISTOR	10 1/16W
R14	NRSA63J-100X	M.G.RESISTOR	10 1/16W
R15	NRSA63J-100X	M.G.RESISTOR	10 1/16W
R17	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R18	NRSA63J-683X	M.G.RESISTOR	68k 1/16W
R19	NRSA63J-394X	M.G.RESISTOR	390k 1/16W
R20	NRSA63J-680X	M.G.RESISTOR	68 1/16W
R21	NRSA63J-561X	M.G.RESISTOR	560 1/16W
R23	NRSA63J-332X	M.G.RESISTOR	3.3k 1/16W
R51	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
C1	NCB31HK-103X	CER.CAPACITOR	0.01 50V
C2	NCB31HK-103X	CER.CAPACITOR	0.01 50V
C3	NCB31HK-103X	CER.CAPACITOR	0.01 50V
C4	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C5	NCB11AK-106X	CER.CAPACITOR	10 10V
C6	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C7	NCB11AK-106X	CER.CAPACITOR	10 10V
C8	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C9	NCB10JM-335X	CER.CAPACITOR	3.3 6.3V
C10	NCB31HK-682X	CER.CAPACITOR	6800p 50V
C11	NCB11AK-106X	CER.CAPACITOR	10 10V
C12	NCB11CK-105X	CER.CAPACITOR	1 16V
C13	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C14	NCB30JK-225X	CER.CAPACITOR	2.2 6.3V
C15	NCB30JK-225X	CER.CAPACITOR	2.2 6.3V
C16	NCB30JK-225X	CER.CAPACITOR	2.2 6.3V
C17	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C18	NCB11AK-106X	CER.CAPACITOR	10 10V
C19	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C20	NCB11AK-106X	CER.CAPACITOR	10 10V
C21	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C22	NCB11CK-105X	CER.CAPACITOR	1 16V
C23	NCB11CK-105X	CER.CAPACITOR	1 16V
C24	NDC31HJ-101X	CER.CAPACITOR	100p 50V
C25	NCB11CK-105X	CER.CAPACITOR	1 16V
C26	NCB31HK-102X	CER.CAPACITOR	1000p 50V
C27	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C28	NCB31CK-104X	CER.CAPACITOR	0.1 16V
L1	NQLA3GK-101X	COIL	100uH
L2	NQLA3GK-101X	COIL	100uH
L3	NQLA3GK-101X	COIL	100uH
L4	NQLA3GK-101X	COIL	100uH
L5	NQLA3GK-101X	COIL	100uH
CN60	QGF0517F1-20X	CONNECTOR	20PIN
CN61	QGF0508F2-20X	CONNECTOR	20PIN
CN66	QGA1002F1-02X	CONNECTOR	2PIN
TP1	NNZ0009-001X	TEST POINT	LCD_G
TP2	NNZ0009-001X	TEST POINT	LCD_R
TP3	NNZ0009-001X	TEST POINT	LCD_B
TP4	NNZ0009-001X	TEST POINT	COM OUT

3 4 [VF DR]

Symbol No.	Part No.	Part Name	Description
TP5	NNZ0009-001X	TEST POINT	GND
K1	NQR0265-003X	FERRITE BEADS	
K2	NQR0265-003X	FERRITE BEADS	
K3	NQR0265-003X	FERRITE BEADS	
K4	NQR0265-003X	FERRITE BEADS	
K5	NQR0265-003X	FERRITE BEADS	
K6	NQR0265-003X	FERRITE BEADS	

6.13 MOS BOARD ASSEMBLY PARTS LIST 3 5

CK279400A6

3 5 ☐☐☐☐☐☐

Symbol No.	Part No.	Part Name	Description
Q1	DTC124EUA-X	TRANSISTOR	ROHM
Q2	DTC124EUA-X	TRANSISTOR	ROHM
D1	SML-020MVT-W	L.E.D.	ROHM
R1	NRSA63D-181X	M.G.RESISTOR	180 1/16W
R2	NRSA63D-101X	M.G.RESISTOR	100 1/16W
C1	NCB31CK-104X	CER.CAPACITOR	0.1 16V
S1	NSW0010-001X	SWITCH	DISPLAY
S2	NSW0070-001X	SLIDE SWITCH	FULL AUTO
S3	NSW0070-002X	SLIDE SWITCH	MONITOR SELECT
CN44	QGF0534F1-18X	CONNECTOR	18PIN

6.14 DC IN BOARD ASSEMBLY PARTS LIST 4 1

CK279800A1

4 1 ☐☐☐☐☐☐

Symbol No.	Part No.	Part Name	Description
D1	HZM18NB2-X	ZENER DIODE	HITACHI
J5	QNA0010-001	DC JACK	DC INPUT
CN53	WJK0207-002A-E	CONNECTOR	4PIN
CN54	QUB210-07A2MP-E	CONNECTOR	15PIN
CN55	QUB212-09A2MP-E	CONNECTOR	15PIN

6.15 VJK BOARD ASSEMBLY PARTS LIST 4 2

CK279800A2

4 2 ☐☐☐☐☐☐

Symbol No.	Part No.	Part Name	Description
R1	NRSA63D-470X	M.G.RESISTOR	47 1/16W
R2	NRSA63D-470X	M.G.RESISTOR	47 1/16W
R3	NRSA63D-470X	M.G.RESISTOR	47 1/16W
R4	NRSA63D-102X	M.G.RESISTOR	1k 1/16W
R5	NRSA63D-102X	M.G.RESISTOR	1k 1/16W
J2	QNN0722-001	PIN JACK	Y/VID,Pb,Pr OUT
CN34	QGF0508F1-10X	CONNECTOR	10PIN

6.16 DV OUT BOARD ASSEMBLY PARTS LIST 4 3

CK279800A3

4 3 ☐☐☐☐☐☐

Symbol No.	Part No.	Part Name	Description
R1	NRSA63J-105X	M.G.RESISTOR	1M 1/16W
R2	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R3	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R4	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R5	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
C1	NCZ1009-472X	CER.CAPACITOR	4700p
J1	QNZ0789-001	MODU CONNECTOR	IEEE1394
CN54	QGA1002C1-06X	CONNECTOR	6PIN

6.17 EAR BOARD ASSEMBLY PARTS LIST 4 4

CK279800A4

4 4 ☐☐☐☐☐☐

Symbol No.	Part No.	Part Name	Description
R1	NRSA63D-470X	M.G.RESISTOR	47 1/16W
R2	NRSA63D-470X	M.G.RESISTOR	47 1/16W
R3	NRSA63D-470X	M.G.RESISTOR	47 1/16W
R4	NRSA63D-470X	M.G.RESISTOR	47 1/16W
C1	NDC31HJ-181X	CER.CAPACITOR	180p 50V
C2	NDC31HJ-181X	CER.CAPACITOR	180p 50V
C3	NDC31HJ-181X	CER.CAPACITOR	180p 50V
C4	NDC31HJ-181X	CER.CAPACITOR	180p 50V
J6	QNS0261-001	3.5 JACK	EAR PHONE
J7	QNS0261-001	3.5 JACK	EAR PHONE
CN12	QGA1002F1-07X	CONNECTOR	7PIN
CN47	QGA1002F1-02X	CONNECTOR	2PIN
K1	NQR0200-004X	FILTER(CHIP)	
K2	NQR0200-004X	FILTER(CHIP)	

6.18 MNU BOARD ASSEMBLY PARTS LIST 5 1

CK279900A1 5 1 ☐ ☐ ☐ ☐ ☐ ☐

Symbol No.	Part No.	Part Name	Description
JS1	QSW0603-001	ROTARY SWITCH	SHUTTER
CN51	QGA1002C1-04X	CONNECTOR	4PIN

6.19 OPE BOARD ASSEMBLY PARTS LIST 5 2

CK279900A2 5 2 ☐ ☐ ☐ ☐ ☐ ☐

Symbol No.	Part No.	Part Name	Description
R1	NRSA63D-102X	M.G.RESISTOR	1k 1/16W
R2	NRSA63D-122X	M.G.RESISTOR	1.2k 1/16W
R3	NRSA63D-222X	M.G.RESISTOR	2.2k 1/16W
S1	NSW0010-001X	SWITCH	REW
S2	NSW0010-001X	SWITCH	STOP
S3	NSW0010-001X	SWITCH	FF
S4	NSW0010-001X	SWITCH	PLAY/STILL
CN4	QGA1002F1-03X	CONNECTOR	3PIN

6.20 EJT BOARD ASSEMBLY PARTS LIST 5 3

CK279900A3 5 3 ☐ ☐ ☐ ☐ ☐ ☐

Symbol No.	Part No.	Part Name	Description
Q1	DTC124EUA-X	TRANSISTOR	ROHM
D1	SML-210MT/MN/-X	L.E.D.	ROHM
R1	NRSA63J-471X	M.G.RESISTOR	470 1/16W
S1	NSW0233-001X	PUSH SWITCH	EJECT
CN42	QGF0508F1-06X	CONNECTOR	6PIN

6.21 VF IF BOARD ASSEMBLY PARTS LIST 5 4

CK279900A4 5 4 ☐ ☐ ☐ ☐ ☐ ☐

Symbol No.	Part No.	Part Name	Description
D1	NNCD6.2D-A-X	Z DIODE	NEC
D2	NNCD6.2D-A-X	Z DIODE	NEC
D3	NNCD6.2D-A-X	Z DIODE	NEC
D4	NNCD6.2D-A-X	Z DIODE	NEC
D5	NNCD6.2D-A-X	Z DIODE	NEC
D6	NNCD6.2D-A-X	Z DIODE	NEC
R1	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R2	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R3	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R10	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R51	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R52	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R53	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
C51	NCB11AK-106X	CER.CAPACITOR	10 10V
C52	NCB11AK-106X	CER.CAPACITOR	10 10V
C53	NCB11AK-106X	CER.CAPACITOR	10 10V
CN60	QGF0517F1-20X	CONNECTOR	20PIN
CN65	QGA1206C2-20X	CONNECTOR	20PIN
TP1	NNZ0009-001X	TEST POINT	G IN
TP2	NNZ0009-001X	TEST POINT	R IN
TP3	NNZ0009-001X	TEST POINT	B IN
TP4	NNZ0009-001X	TEST POINT	GND

6.22 AWB BOARD ASSEMBLY PARTS LIST 5 5

CK279900A5 5 5 ☐ ☐ ☐ ☐ ☐ ☐

Symbol No.	Part No.	Part Name	Description
S1	NSW0010-001X	SWITCH	AWB
CN9	QGA1002C1-02X	CONNECTOR	2PIN

6.23 XLR BOARD ASSEMBLY PARTS LIST 5 6

CK279900A6 5 6 ☐☐☐☐☐☐

Symbol No.	Part No.	Part Name	Description
R1	NRSA63J-202X	M.G.RESISTOR	2k 1/16W
R2	NRSA63J-202X	M.G.RESISTOR	2k 1/16W
R3	NRSA63J-202X	M.G.RESISTOR	2k 1/16W
R4	NRSA63J-202X	M.G.RESISTOR	2k 1/16W
R5	NRSA63J-202X	M.G.RESISTOR	2k 1/16W
R6	NRSA63J-202X	M.G.RESISTOR	2k 1/16W
R7	NRSA63J-202X	M.G.RESISTOR	2k 1/16W
R8	NRSA63J-202X	M.G.RESISTOR	2k 1/16W
R9	NRSA63D-272X	M.G.RESISTOR	2.7k 1/16W
R10	NRSA63D-272X	M.G.RESISTOR	2.7k 1/16W
R11	NRSA63D-272X	M.G.RESISTOR	2.7k 1/16W
R12	NRSA63D-272X	M.G.RESISTOR	2.7k 1/16W
R13	NRSA63J-222X	M.G.RESISTOR	2.2k 1/16W
R14	NRSA63J-222X	M.G.RESISTOR	2.2k 1/16W
R15	NRSA63J-222X	M.G.RESISTOR	2.2k 1/16W
R16	NRSA63J-222X	M.G.RESISTOR	2.2k 1/16W
C1	NDC31HJ-221X	CER.CAPACITOR	220p 50V
C2	NDC31HJ-221X	CER.CAPACITOR	220p 50V
C3	NDC31HJ-221X	CER.CAPACITOR	220p 50V
C4	NDC31HJ-221X	CER.CAPACITOR	220p 50V
C5	NDC31HJ-221X	CER.CAPACITOR	220p 50V
C6	NDC31HJ-221X	CER.CAPACITOR	220p 50V
C7	NDC31HJ-221X	CER.CAPACITOR	220p 50V
C8	NDC31HJ-221X	CER.CAPACITOR	220p 50V
C9	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C10	NCB31CK-104X	CER.CAPACITOR	0.1 16V
C11	NCB31HK-222X	CER.CAPACITOR	2200p 50V
C12	NCB31HK-222X	CER.CAPACITOR	2200p 50V
C13	NELA1JM-475X	E.CAPACITOR	4.7 63V
C14	NELA1JM-475X	E.CAPACITOR	4.7 63V
C15	NELA1JM-475X	E.CAPACITOR	4.7 63V
C16	NELA1JM-475X	E.CAPACITOR	4.7 63V
L1	NQL124J-101X	COIL	100uH
L2	NQL124J-101X	COIL	100uH
L3	NQL124J-101X	COIL	100uH
L4	NQL124J-101X	COIL	100uH
J8	QNZ0013-001	CONNECTOR	AUDIO INPUT 1
J9	QNZ0013-001	CONNECTOR	AUDIO INPUT 2
CN1	NNZ0137-001X	CONNECTOR	
CN2	NNZ0137-001X	CONNECTOR	
CN41	QGF0534F1-13X	CONNECTOR	13PIN
K1	NQR0200-004X	FILTER(CHIP)	
K2	NQR0200-004X	FILTER(CHIP)	
K3	NQR0200-004X	FILTER(CHIP)	
K4	NQR0200-004X	FILTER(CHIP)	

6.24 SWP BOARD ASSEMBLY PARTS LIST 5 7

CK279900A7 5 7 ☐☐☐☐☐☐

Symbol No.	Part No.	Part Name	Description
D1	HZM36NB-W	ZENER DIODE	HITACHI
S1	QSW0048-001	TOGGLE SWITCH	POWER
CN52	QGA1002F1-02X	CONNECTOR	2PIN

6.25 STA BOARD ASSEMBLY PARTS LIST 5 8

CK279900A8 5 8 ☐☐☐☐☐☐

Symbol No.	Part No.	Part Name	Description
Q1	DTC124EUA-X	TRANSISTOR	ROHM
Q2	DTC124EUA-X	TRANSISTOR	ROHM
D1	SML011BBT/PQR-X	L.E.D.	ROHM
D2	SML-011DT/LMN-X	L.E.D.	ROHM
R1	NRSA63D-681X	M.G.RESISTOR	680 1/16W
R2	NRSA63D-681X	M.G.RESISTOR	680 1/16W
R3	NRSA63D-122X	M.G.RESISTOR	1.2k 1/16W
R4	NRSA63D-122X	M.G.RESISTOR	1.2k 1/16W
S1	NSW0010-001X	SWITCH	STATUS
S2	NSW0233-001X	PUSH SWITCH	ND FILTER
S3	NSW0233-001X	PUSH SWITCH	ND FILTER
CN10	QGF0508F1-24X	CONNECTOR	24PIN
CN50	QGF0534F1-11X	CONNECTOR	11PIN
CN51	QGA1002F1-04X	CONNECTOR	4PIN
CN52	QGA1002F1-02X	CONNECTOR	2PIN

6.26 AVR BOARD ASSEMBLY PARTS LIST 5 9
CK279900A9 5 9 ☐☐☐☐☐☐

Symbol No.	Part No.	Part Name	Description
Q1	DTC124EUA-X	TRANSISTOR	ROHM
Q2	DTC124EUA-X	TRANSISTOR	ROHM
D1	SML-020MVT-W	L.E.D.	ROHM
D2	SML-020MVT-W	L.E.D.	ROHM
D3	HZM12NB2-X	ZENER DIODE	HITACHI
D4	HZM12NB2-X	ZENER DIODE	HITACHI
D5	HZM12NB2-X	ZENER DIODE	HITACHI
D6	HZM12NB2-X	ZENER DIODE	HITACHI
R1	NRSA63D-221X	M.G.RESISTOR	220 1/16W
R2	NRSA63D-391X	M.G.RESISTOR	390 1/16W
R3	NRSA63D-221X	M.G.RESISTOR	220 1/16W
R4	NRSA63D-391X	M.G.RESISTOR	390 1/16W
R5	NRSA63D-222X	M.G.RESISTOR	2.2k 1/16W
R6	NRSA63D-222X	M.G.RESISTOR	2.2k 1/16W
R7	NRSA63D-222X	M.G.RESISTOR	2.2k 1/16W
R8	NRSA63D-222X	M.G.RESISTOR	2.2k 1/16W
VR1	QVQ0336-A14	VAL.RESISTOR	A10k A.LEVEL 1
VR2	QVQ0336-A14	VAL.RESISTOR	A10k A.LEVEL 2
C1	NCB31CK-104X	CER.CAPACITOR	0.1 16V
S1	QSW0049-001	TOGGLE SWITCH	WHITE BALANCE
S2	QSW0052-001	TOGGLE SWITCH	GAIN
S3	NSW0010-001X	SWITCH	REC
CN45	QGF0534F1-18X	CONNECTOR	18PIN

6.27 MON BL BOARD ASSEMBLY PARTS LIST 6 1
CK280200A1 6 1 ☐☐☐☐☐☐

Symbol No.	Part No.	Part Name	Description
IC901	TK11880F-W	I.C.(M)	TOKO DENSHI
D901	RB160M-30-X	SB DIODE	ROHM
R902	NRSA63J-680X	M.G.RESISTOR	68 1/16W
R904	NRSA63J-223X	M.G.RESISTOR	22k 1/16W
R906	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R907	NRSA63J-680X	M.G.RESISTOR	68 1/16W
R914	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R919	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R920	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R922	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
C901	NCB11AK-225X	CER.CAPACITOR	2.2 10V
C902	NCB11CK-105X	CER.CAPACITOR	1 16V
C903	NCB11HK-224X	CER.CAPACITOR	0.22 50V
C904	NCB11HK-224X	CER.CAPACITOR	0.22 50V
C909	NCB11AK-225X	CER.CAPACITOR	2.2 10V
C951	NCB11HK-224X	CER.CAPACITOR	0.22 50V
C952	NCB11HK-224X	CER.CAPACITOR	0.22 50V
C953	NCB11HK-224X	CER.CAPACITOR	0.22 50V
L901	NQL89EM-220X	COIL	22uH
CN62	QGF0506F2-32X	CONNECTOR	32PIN
CN63	QGF1004F2-06X	CONNECTOR	6PIN
CN64	QGF0517F1-24X	CONNECTOR	24PIN
CN901	NNZ0137-001X	CONNECTOR	

6.28 FTY BOARD ASSEMBLY PARTS LIST 6 2
CK280200A2 6 2 ☐☐☐☐☐☐

Symbol No.	Part No.	Part Name	Description
D1	SML-012UT/RST-X	L.E.D.	ROHM
D2	SML-012UT/RST-X	L.E.D.	ROHM
D3	SML-012UT/RST-X	L.E.D.	ROHM
R3	NRSA63D-471X	M.G.RESISTOR	470 1/16W
R4	NRSA63D-271X	M.G.RESISTOR	270 1/16W
R5	NRSA63D-681X	M.G.RESISTOR	680 1/16W
R6	NRSA63D-681X	M.G.RESISTOR	680 1/16W
CN8	QGF0508F1-06X	CONNECTOR	6PIN

6.29 USR BOARD ASSEMBLY PARTS LIST 6 3
CK280200A3 6 3 ☐☐☐☐☐☐

Symbol No.	Part No.	Part Name	Description
S1	NSW0010-001X	SWITCH	USER1
S2	NSW0010-001X	SWITCH	USER2
S3	NSW0010-001X	SWITCH	USER3
CN50	QGF0508F1-11X	CONNECTOR	11PIN
CN55	QGF0508F1-10X	CONNECTOR	10PIN

6.30 FRL BOARD ASSEMBLY PARTS LIST 6 4
CK280200A4 6 4 ☐☐☐☐☐☐

Symbol No.	Part No.	Part Name	Description
S1	NSW0010-001X	SWITCH	FOCUS ASSIST
S2	NSW0010-001X	SWITCH	REC
S3	NSW0256-001X	SLIDE SWITCH	REC LOCK
CN8	QGF0508F1-06X	CONNECTOR	6PIN
CN48	QGF0508F1-10X	CONNECTOR	10PIN

6.31 PBM BOARD ASSEMBLY PARTS LIST 6 5
CK280200A5 6 5 ☐☐☐☐☐☐

Symbol No.	Part No.	Part Name	Description
R1	NRSA63D-101X	M.G.RESISTOR	100 1/16W
R2	NRSA63D-101X	M.G.RESISTOR	100 1/16W
R3	NRSA63D-101X	M.G.RESISTOR	100 1/16W
R4	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
R5	NRSA63J-0R0X	M.G.RESISTOR	0 1/16W
VR1	QVQ0336-B14	VAL.RESISTOR	B10k PEAKING
VR2	QVQ0336-B14	VAL.RESISTOR	B10k VF BRIGHT
VR3	QVQ0336-B14	VAL.RESISTOR	B10k MONITOR
C1	NCB31CK-473X	CER.CAPACITOR	0.047 16V
C2	NCB31CK-473X	CER.CAPACITOR	0.047 16V
C3	NCB31CK-473X	CER.CAPACITOR	0.047 16V
S1	QSW0189-001Z	PUSH SWITCH	FOCUS ASSIST
CN55	QGF0534F1-10X	CONNECTOR	10PIN

6.32 ZBR BOARD ASSEMBLY PARTS LIST 6 6
CK280200A6 6 6 ☐☐☐☐☐☐

Symbol No.	Part No.	Part Name	Description
D1	HZM12NB2-X	ZENER DIODE	HITACHI
D2	HZM12NB2-X	ZENER DIODE	HITACHI
S1	QSW0052-005	TOGGLE SWITCH	ZEBRA/SKIN AREA
CN9	QGA1002C1-03X	CONNECTOR	3PIN

6.33 A.JACK BOARD ASSEMBLY PARTS LIST 6 7
CK280200A7 6 7 ☐☐☐☐☐☐

Symbol No.	Part No.	Part Name	Description
C1	NDC31HJ-221X	CER.CAPACITOR	220p 50V
C2	NDC31HJ-221X	CER.CAPACITOR	220p 50V
C3	NDC31HJ-221X	CER.CAPACITOR	220p 50V
C4	NDC31HJ-221X	CER.CAPACITOR	220p 50V
S1	QSW1119-001	SLIDE SWITCH	IEEE1394
J3	QNS0203-001	JACK	LINE OUTPUT
CN11	QGA1002F1-06X	CONNECTOR	6PIN
CN19	QGA1002F1-13X	CONNECTOR	13PIN
CN54	QGA1002F1-06X	CONNECTOR	6PIN
J1	QUB220-05MPRL-E	SIN TWIST WIRE	
K1	NQR0200-004X	FILTER(CHIP)	
K2	NQR0200-004X	FILTER(CHIP)	

6.34 FNC BOARD ASSEMBLY PARTS LIST 6 8
CK280200A8 6 8 ☐☐☐☐☐☐

Symbol No.	Part No.	Part Name	Description
CN90	QGA1002F1-02X	CONNECTOR	2PIN

6.35 M.CONN. BOARD ASSEMBLY PARTS LIST 7 0
LK2149A0A1 7 0 ☐☐☐☐☐☐

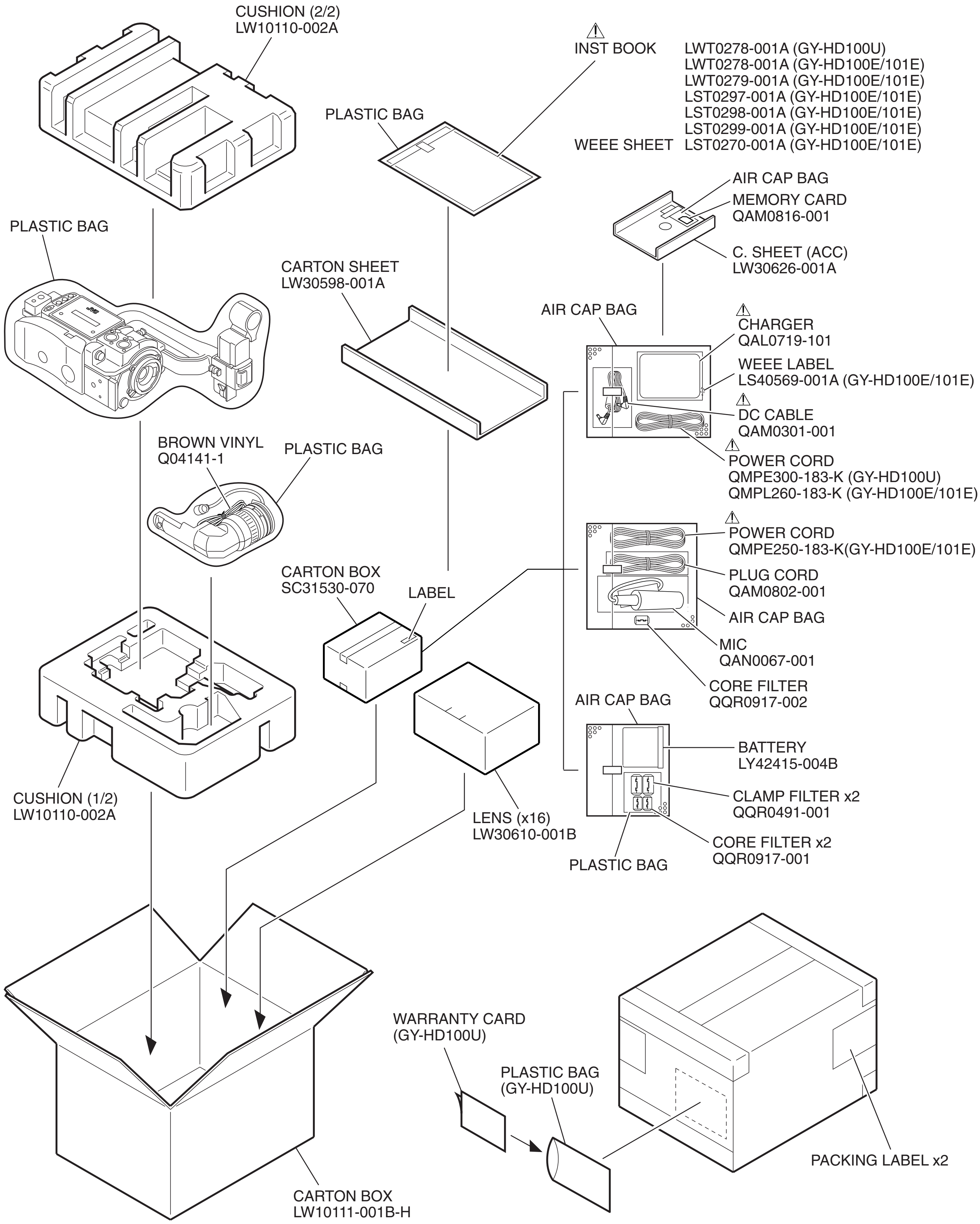
Symbol No.	Part No.	Part Name	Description
CN1	QGF0508F1-11X	CONNECTOR	11PIN
CN2	QGF0508F1-13X	CONNECTOR	13PIN

6.36 TERM. BOARD ASSEMBLY PARTS LIST 8 0
8 0 ☐☐☐☐☐☐

Symbol No.	Part No.	Part Name	Description
PWB	SC84552-002	TERM. BOARD	

SECTION 7
PACKING

7.1 PACKING ASSEMBLY M 1


CUSHION (2/2)
LW10110-002A
⚠
INST BOOK
LWT0278-001A (GY-HD100U)
LWT0278-001A (GY-HD100E/101E)
LWT0279-001A (GY-HD100E/101E)
LST0297-001A (GY-HD100E/101E)
LST0298-001A (GY-HD100E/101E)
LST0299-001A (GY-HD100E/101E)
WEEE SHEET
LST0270-001A (GY-HD100E/101E)
PLASTIC BAG
AIR CAP BAG
MEMORY CARD
QAM0816-001
PLASTIC BAG
C. SHEET (ACC)
LW30626-001A
CARTON SHEET
LW30598-001A
AIR CAP BAG
⚠
CHARGER
QAL0719-101
WEEE LABEL
LS40569-001A (GY-HD100E/101E)
⚠
DC CABLE
QAM0301-001
BROWN VINYL
Q04141-1
PLASTIC BAG
⚠
POWER CORD
QMPE300-183-K (GY-HD100U)
QMPL260-183-K (GY-HD100E/101E)
⚠
POWER CORD
QMPE250-183-K(GY-HD100E/101E)
CARTON BOX
SC31530-070
LABEL
PLUG CORD
QAM0802-001
AIR CAP BAG
MIC
QAN0067-001
CORE FILTER
QQR0917-002
AIR CAP BAG
BATTERY
LY42415-004B
CUSHION (1/2)
LW10110-002A
CLAMP FILTER x2
QQR0491-001
LENS (x16)
LW30610-001B
CORE FILTER x2
QQR0917-001
PLASTIC BAG
WARRANTY CARD
(GY-HD100U)
PLASTIC BAG
(GY-HD100U)
PACKING LABEL x2
CARTON BOX
LW10111-001B-H

SECTION 4
CHARTS AND DIAGRAMS

■ SCHEMATIC DIAGRAM NOTES

- Schematic safety precaution
  ⚠ Parts are safety related parts.
  When replacing them, be sure to use the specified parts.
- Unit of value
  Unless otherwise specified
  1) Resistance is in Ω (1/6 W)
  2) Capacitance is in µF
  3) Inductance is in µH
- Expression of wiring

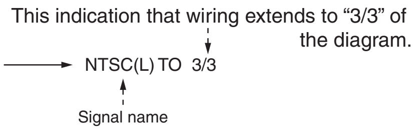
As the following circuit diagram is divided to print on some sheets, such an indication as the following is found in the case the wiring extends over two or more divided sections.

1) Circuit diagram divided into two or more sections:

Board	Board Name	Number of divided sections
10	MAIN	1/18 to 18/18
20	MIF	1/7 to 7/7
30	AUDIO	1/2 to 2/2
33	PR MDA	1/3 to 3/3

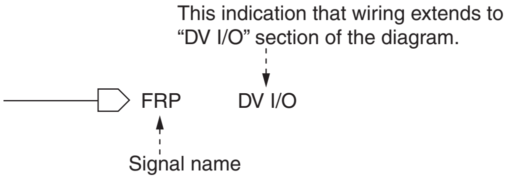
2) Indication of wiring which extends to another section: (Example)

A)


This indication that wiring extends to "3/3" of the diagram.
NTSC(L) TO 3/3
Signal name

In the above case, the end of the wiring is connected to the "NTSC(L)" on the 3nd section of the diagram.

B)


This indication that wiring extends to "DV I/O" section of the diagram.
FRP
DV I/O
Signal name

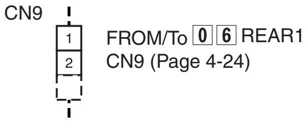
In the above case, the end of the wiring is connected to the "FRP" on the "DV I/O" section of the diagram.

C)

In the above case, the end of the wiring is connected to the "PIX _ RST" on "E" (X-axis) and "8" (Y-axis) position scale in page "3" of the diagram.

- Wiring of connector

(Example)


CN9
1
2
FROM/To 06 REAR1
CN9 (Page 4-24)

In the above example, CN9 is connected with CN9 on 06 REAR1 board.

- Signal flow on the diagram

The following allow marks indicate the specified signal paths respectively.

➡ : Recording or EE signal path
⇨ : Playback signal ptah
➩ : Recording and Playback signal path

- Others

In regard of a board assembly whose circuit is composed of multilayered board patterns such 4- or 6-layered patterns, board patterns of the power supply lines and grounding lines are omitted in this section.

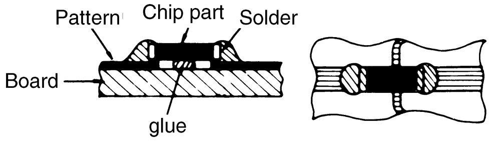
Note: For detail of each electrical part, refer to Section 6 "ELECTRICAL PARTS LIST" by it symbol number.

■ REPLACING SURFACE MOUNT "CHIP" COMPONENTS

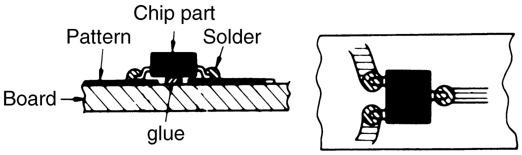
- Some resistors, shorting jumpers (0 resistance), ceramic capacitors, transistors, and diodes are chip parts. These chip parts cannot be reused after they are once removed.
- Chip resistors used in some circuits are of high precision type having little error in resistance.
  To demonstrate the full capacity of this set, place an order for proper parts referring to the diagrams and parts lists in the section 5.
- Soldering cautions:
  1) Do not apply heat for more than 3 seconds.
  2) Avoid using a rubbing stroke when soldering.
  3) Discard removed chips; do not reuse them.
  4) Supplementary cementing is not required.
  5) Use care not to scratch or otherwise damage the chips.

(1) Soldered condition of chip parts

- Resistors, capacitors, etc.

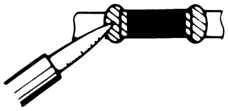

Pattern
Chip part
Solder
Board
glue

- Transistors, diodes, etc.

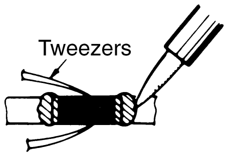

Chip part
Pattern
Solder
Board
glue

(2) Removing of chip parts

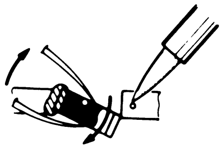
- Resistors, capacitors, etc.
  i) Melt solder at a side.



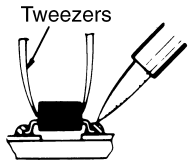
ii) Holding the chip with tweezers, melt solder at the other side.



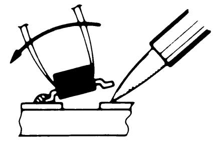
iii) Take off the chip in twisting and sliding motion.



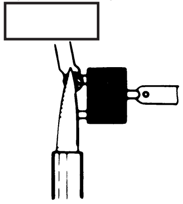
- Transistors, diodes, etc.
  i) Melt solder at the side of single lead.



  ii) Lift the unsolderd side upwards.



  iii) Simultaneously melt solder at two leads of the other side and pull up the chip.

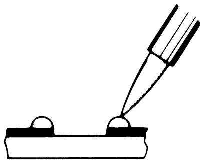


(3) Preheating and soldering of chip parts

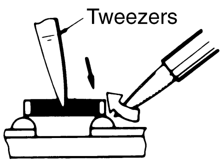
Except transistors, make sure to preheat all chip parts, capacitors in particular, with a hot wind of 150°C approx. (of a hair dryer, etc.) for 2 minutes just before soldering, and immediately solder by a soldering iron of approx. 30 W.

(4) Attaching of chip parts

i) Heap up a proper amount of solder beforehand.



ii) Holding down a new chip by tweezers, solder it to the board by a soldering iron to melt solder from its lower part to the upper part (in the direction shown by a big arrow).

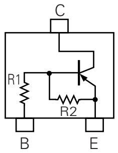


■ CHIP PARTS PIN ARRANGEMENT

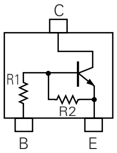
[1] Digital transistors

DTC 1 □□□□
① ②③

DTA 1 □□□□
DTB 1 □□□□
① ②③



(Top view)



(Top view)

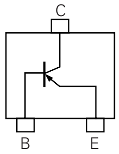
① Two digits show resistance of R1 in abbreviation.
43 : 4.7 kΩ
14 : 10 kΩ
24 : 22 kΩ
44 : 47 kΩ

② Roman letter show the resistive ratio between R1 and R2 in abbreviation.
E : R2/R1 = 1/1
Y : R2/R1 = 5/1
W : R2/R1 = 2/1
X : R2/R1 = 1/2
T : R2 is opened.

③ Symbol the shape of resistor in abbreviation.

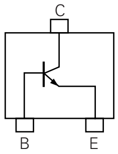
[2] Chip transistors and chip F.E.T.s

2SA □□□□
2SB □□□□



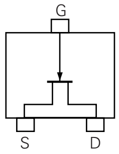
(Top view)

2SC □□□□
2SD □□□□



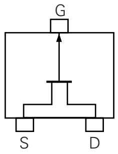
(Top view)

2SK □□□□



(Top view)

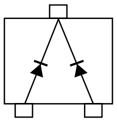
2SJ □□□□



(Top view)

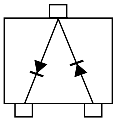
[3] Chip diodes

MA143A/MA742



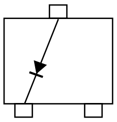
(Top view)

MA142WA



(Top view)

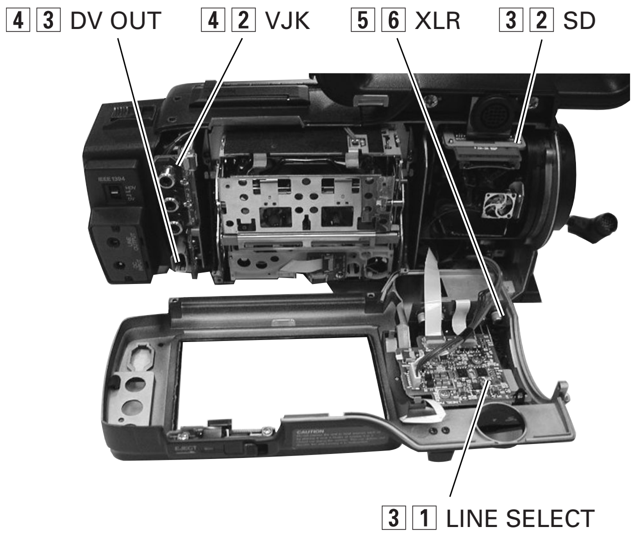
MA142A

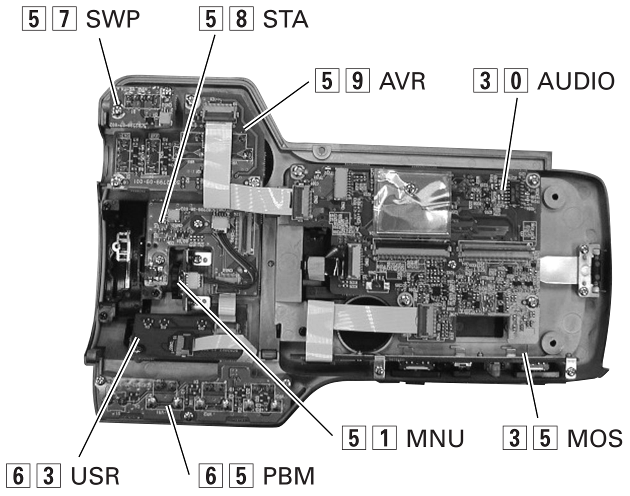


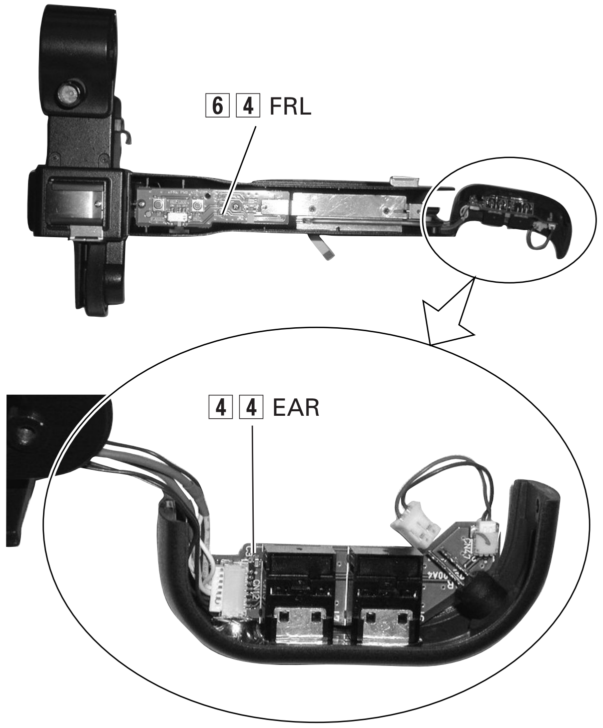
(Top view)

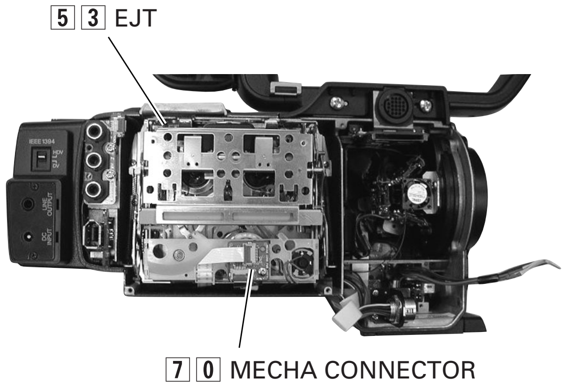
4.1 INDEX TO PAGES OF MAIN BOARDS AND CIRCUIT BOARD LOCATION

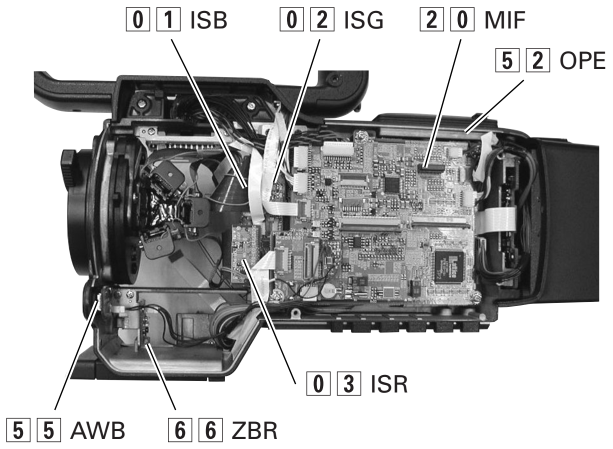
4.1.1 Circuit board location

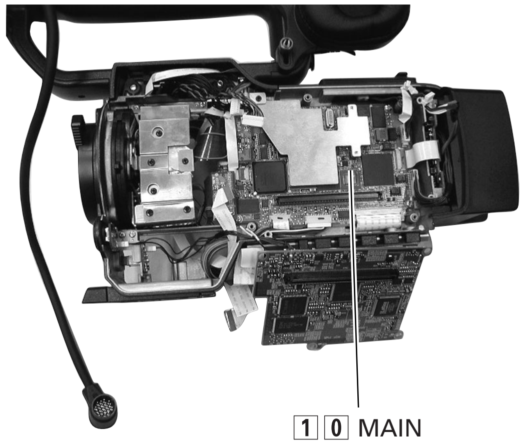

43 DV OUT
42 VJK
56 XLR
32 SD
31 LINE SELECT

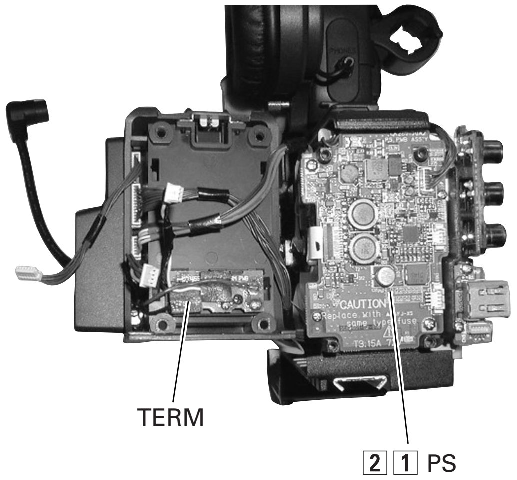

57 SWP
58 STA
59 AVR
30 AUDIO
51 MNU
35 MOS
63 USR
65 PBM

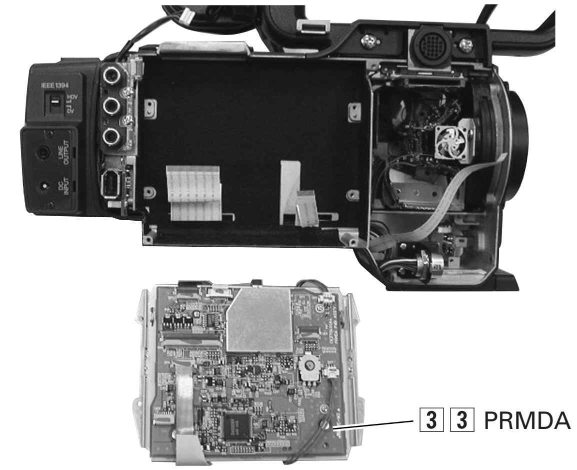

64 FRL
44 EAR


53 EJT
70 MECHA CONNECTOR


01 ISB
02 ISG
20 MIF
52 OPE
03 ISR
55 AWB
66 ZBR

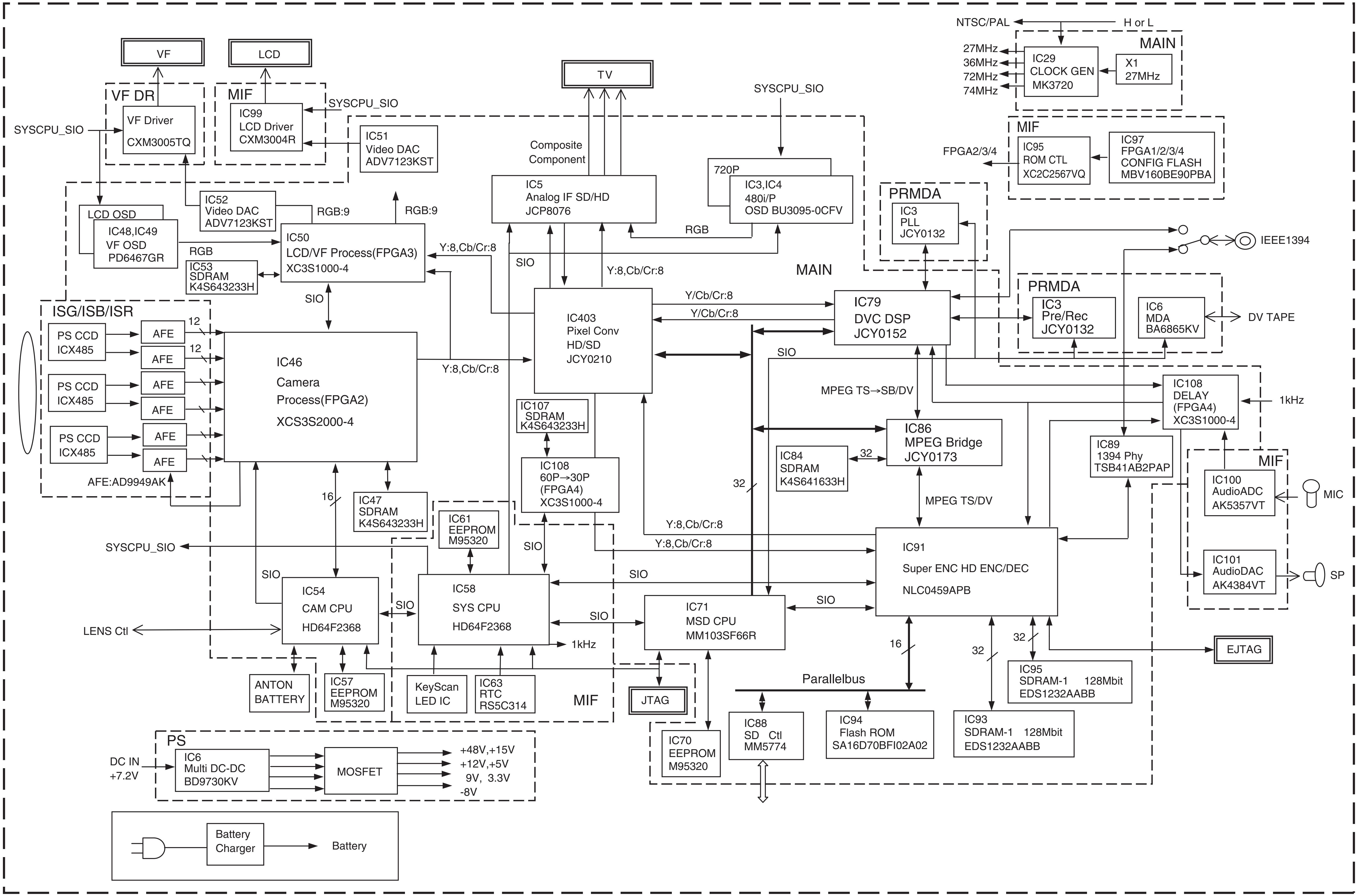




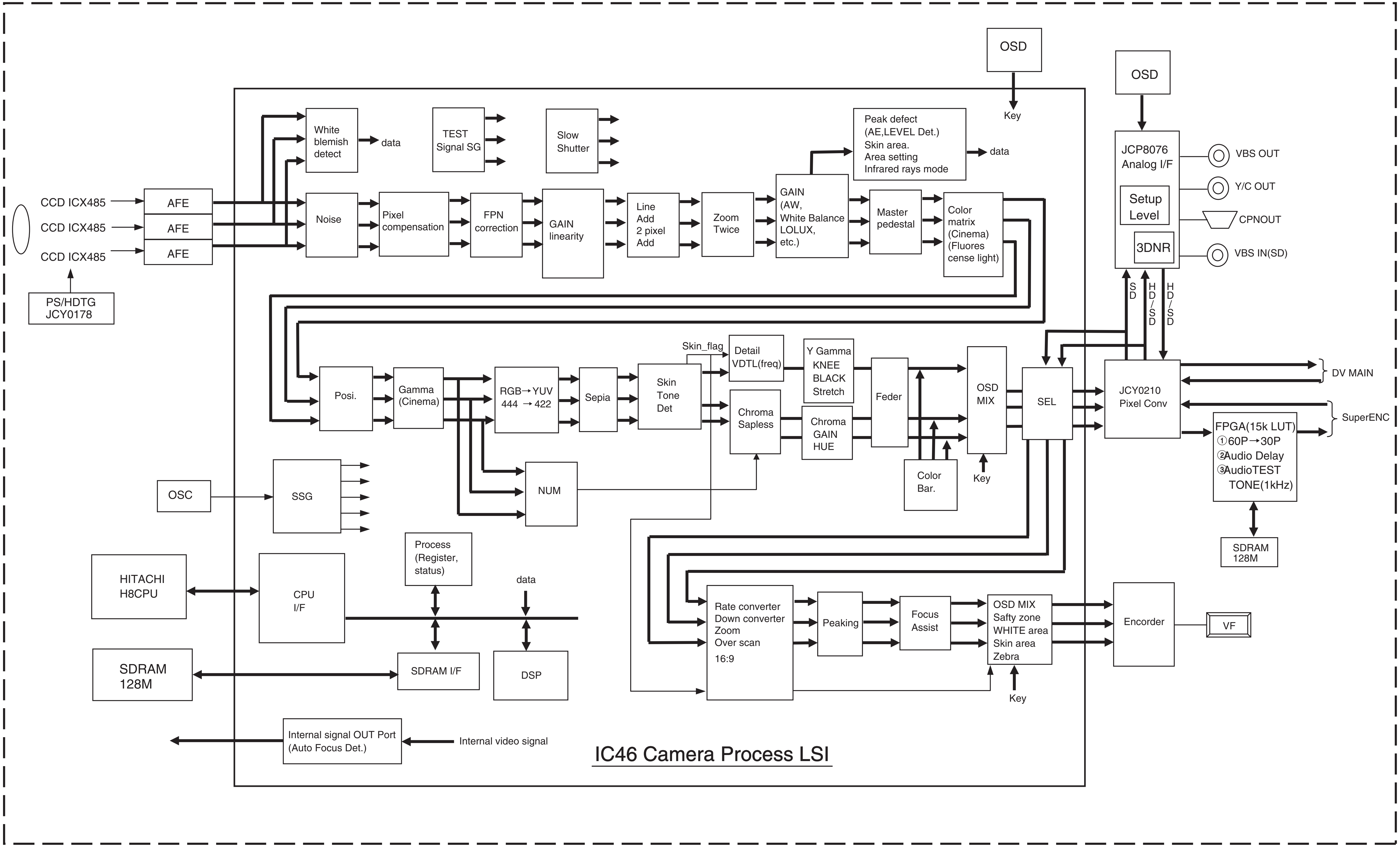


Board No.	Board Name	Page of diagram	
		Schematic diagram	Circuit board
01	ISB	4-8	4-10
02	ISG	4-7	4-10
03	ISR	4-9	4-10
10	MAIN	4-11 to 4-28	4-29
20	MIF	4-31 to 4-37	4-30
21	PS	4-38	4-30
30	AUDIO	4-44 to 4-45	4-43
31	LINE SELECT	4-46	4-47
32	SD	4-48	4-49
33	PRMDA	4-40 to 4-42	4-39
34	VF DR	4-56	4-55
35	MOS	4-48	4-49
41	DC IN	4-48	4-49
42	V JK	4-48	4-49
43	DV OUT	4-48	4-49
44	EAR	4-48	4-49
51	MNU	4-50	4-51
52	OPE	4-50	4-51
53	EJT	4-50	4-51
54	VF IF	4-54	4-55
55	AWB	4-50	4-51
56	XLR	4-50	4-51
57	SWP	4-50	4-51
58	STA	4-50	4-51
59	AVR	4-50	4-51
61	M BL	4-57	4-58
62	FTY	4-52	4-53
63	USR	4-52	4-53
64	FRL	4-52	4-53
65	PBM	4-52	4-53
66	ZBR	4-52	4-53
67	A JACK	4-52	4-53
70	MECHA CONNECTOR	4-52	4-53
80	FNC	4-52	4-53

4.2 GY-HD100 BLOCK DIAGRAM

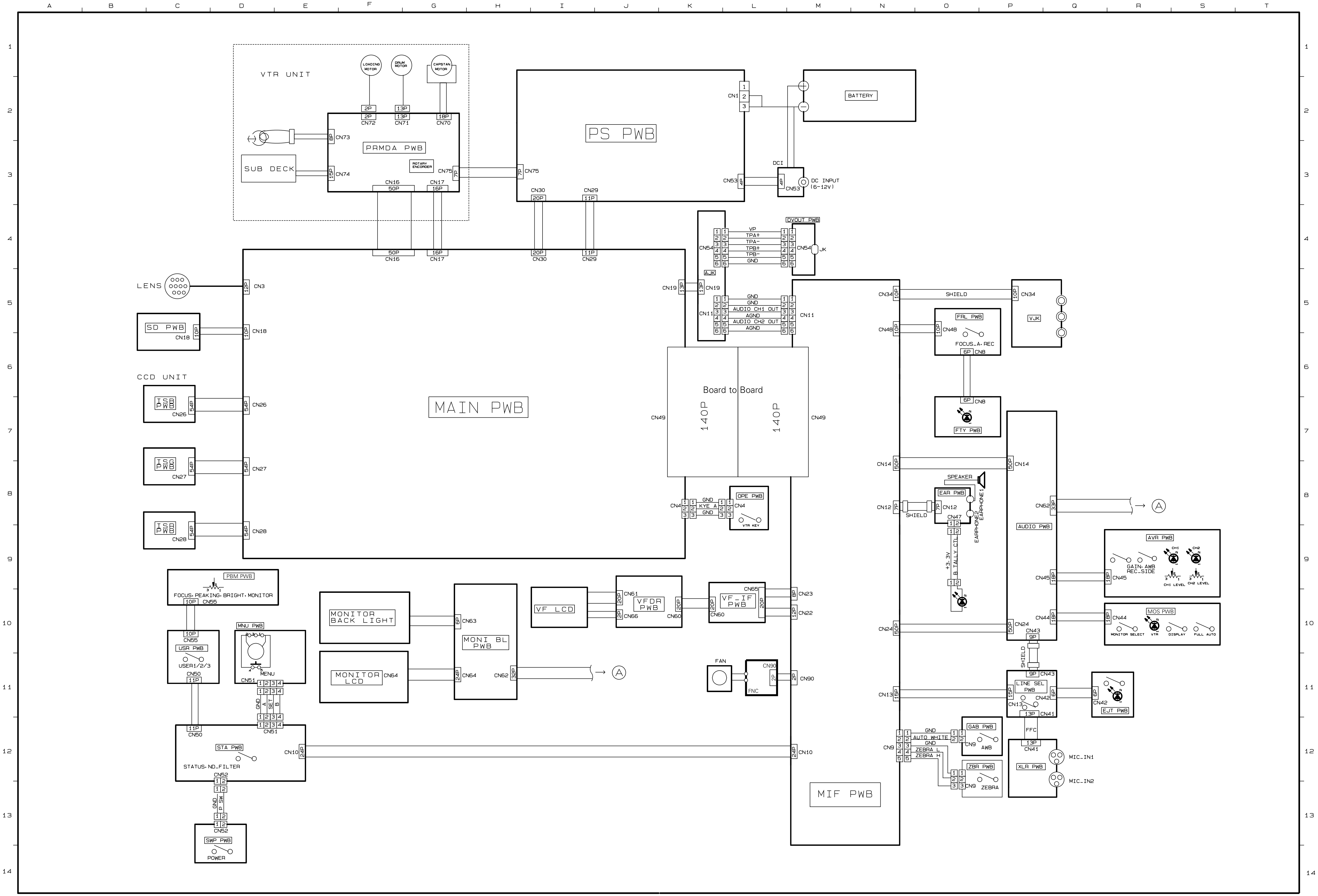

VF
LCD
TV
NTSC/PAL
H or L
MAIN
27MHz
36MHz
72MHz
74MHz
IC29
CLOCK GEN
MK3720
X1
27MHz
SYSCPU_SIO
VF DR
VF Driver
CXM3005TQ
MIF
IC99
LCD Driver
CXM3004R
SYSCPU_SIO
IC51
Video DAC
ADV7123KST
Composite
Component
IC5
Analog IF SD/HD
JCP8076
SYSCPU_SIO
720P
IC3,IC4
480i/P
OSD BU3095-0CFV
MIF
FPGA2/3/4
IC95
ROM CTL
XC2C2567VQ
IC97
FPGA1/2/3/4
CONFIG FLASH
MBV160BE90PBA
LCD OSD
IC48,IC49
VF OSD
PD6467GR
IC52
Video DAC
ADV7123KST
RGB:9
RGB:9
RGB
IC50
LCD/VF Process(FPGA3)
XC3S1000-4
IC53
SDRAM
K4S643233H
Y:8,Cb/Cr:8
SIO
RGB
Y:8,Cb/Cr:8
MAIN
PRMDA
IC3
PLL
JCY0132
IEEE1394
ISG/ISB/ISR
PS CCD
ICX485
AFE
12
12
IC46
Camera
Process(FPGA2)
XCS3S2000-4
AFE:AD9949AK
SIO
Y:8,Cb/Cr:8
IC403
Pixel Conv
HD/SD
JCY0210
Y/Cb/Cr:8
Y/Cb/Cr:8
IC79
DVC DSP
JCY0152
PRMDA
IC3
Pre/Rec
JCY0132
IC6
MDA
BA6865KV
DV TAPE
SIO
MPEG TS→SB/DV
IC108
DELAY
(FPGA4)
XC3S1000-4
1kHz
IC107
SDRAM
K4S643233H
IC108
60P→30P
(FPGA4)
XC3S1000-4
IC86
MPEG Bridge
JCY0173
IC84
SDRAM
K4S641633H
32
IC89
1394 Phy
TSB41AB2PAP
MIF
IC100
AudioADC
AK5357VT
MIC
32
MPEG TS/DV
16
IC47
SDRAM
K4S643233H
IC61
EEPROM
M95320
SIO
Y:8,Cb/Cr:8
Y:8,Cb/Cr:8
IC91
Super ENC HD ENC/DEC
NLC0459APB
IC101
AudioDAC
AK4384VT
SP
SYSCPU_SIO
SIO
IC54
CAM CPU
HD64F2368
SIO
IC58
SYS CPU
HD64F2368
SIO
SIO
IC71
MSD CPU
MM103SF66R
SIO
LENS Ctl
1kHz
16
32
32
EJTAG
ANTON
BATTERY
IC57
EEPROM
M95320
KeyScan
LED IC
IC63
RTC
RS5C314
MIF
JTAG
Parallelbus
IC95
SDRAM-1 128Mbit
EDS1232AABB
IC70
EEPROM
M95320
IC88
SD Ctl
MM5774
IC94
Flash ROM
SA16D70BFI02A02
IC93
SDRAM-1 128Mbit
EDS1232AABB
PS
DC IN
+7.2V
IC6
Multi DC-DC
BD9730KV
MOSFET
+48V,+15V
+12V,+5V
9V, 3.3V
-8V
Battery
Charger
Battery

4.3 CAMERA PROCESS BLOCK DIAGRAM

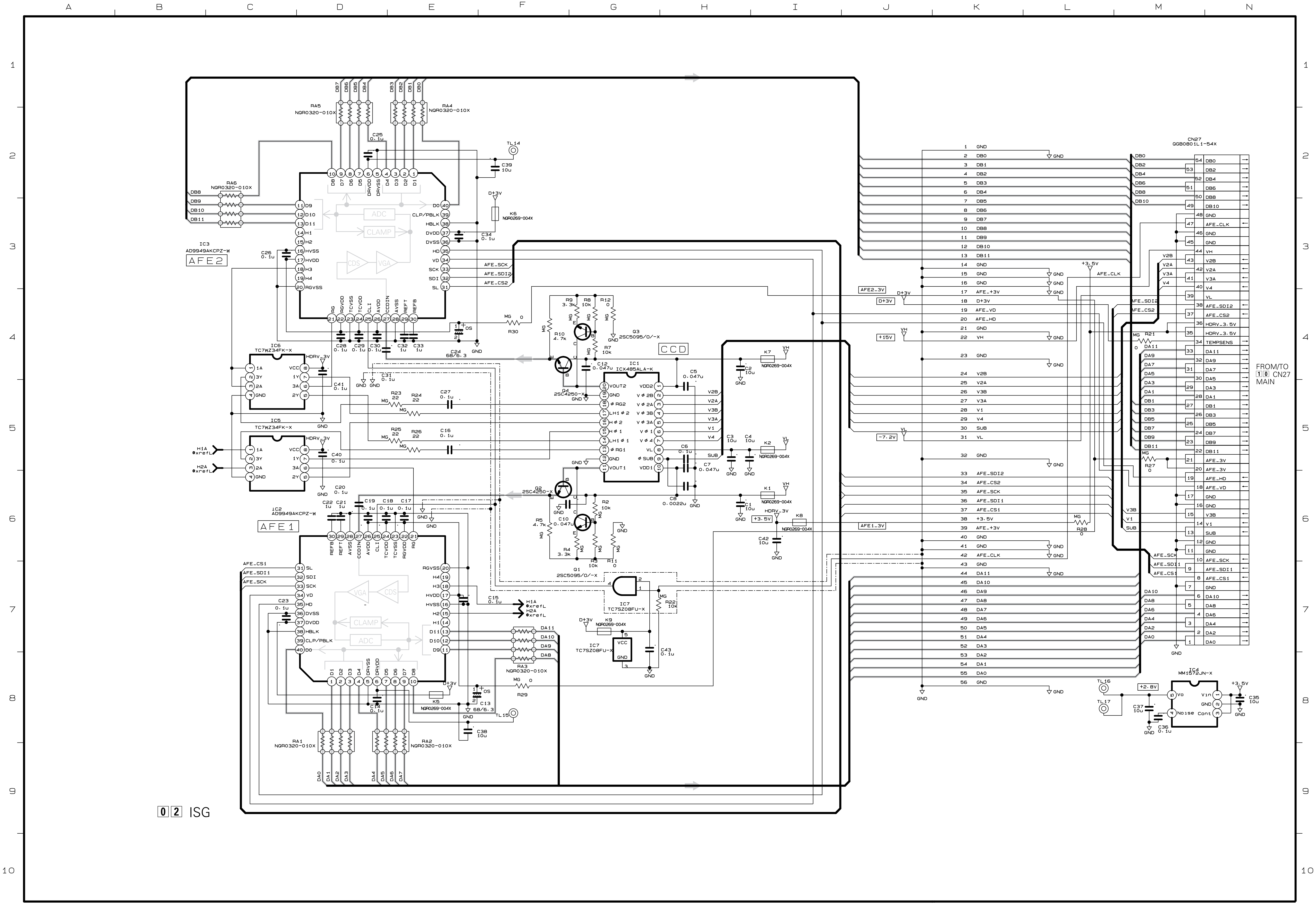


OSD
Key
OSD
CCD ICX485
CCD ICX485
CCD ICX485
AFE
AFE
AFE
PS/HDTG
JCY0178
White blemish detect
data
TEST Signal SG
Slow Shutter
Peak defect (AE,LEVEL Det.) Skin area. Area setting Infrared rays mode
data
Noise
Pixel compensation
FPN correction
GAIN linearity
Line Add 2 pixel Add
Zoom Twice
GAIN (AW, White Balance LOLUX, etc.)
Master pedestal
Color matrix (Cinema) (Fluores cense light)
JCP8076 Analog I/F
Setup Level
3DNR
VBS OUT
Y/C OUT
CPNOUT
VBS IN(SD)
SD
HD/SD
HD/SD
Skin_flag
Detail VDTL(freq)
Y Gamma KNEE BLACK Stretch
Feder
OSD MIX
SEL
JCY0210 Pixel Conv
DV MAIN
SuperENC
Posi.
Gamma (Cinema)
RGB→YUV 444 → 422
Sepia
Skin Tone Det
Chroma Sapless
Chroma GAIN HUE
FPGA(15k LUT) ①60P→30P ②Audio Delay ③AudioTEST TONE(1kHz)
Color Bar.
Key
OSC
SSG
NUM
SDRAM 128M
HITACHI H8CPU
CPU I/F
Process (Register, status)
data
SDRAM 128M
SDRAM I/F
DSP
Rate converter Down converter Zoom Over scan 16:9
Peaking
Focus Assist
OSD MIX Safty zone WHITE area Skin area Zebra
Encorder
VF
Key
Internal signal OUT Port (Auto Focus Det.)
Internal video signal
IC46 Camera Process LSI

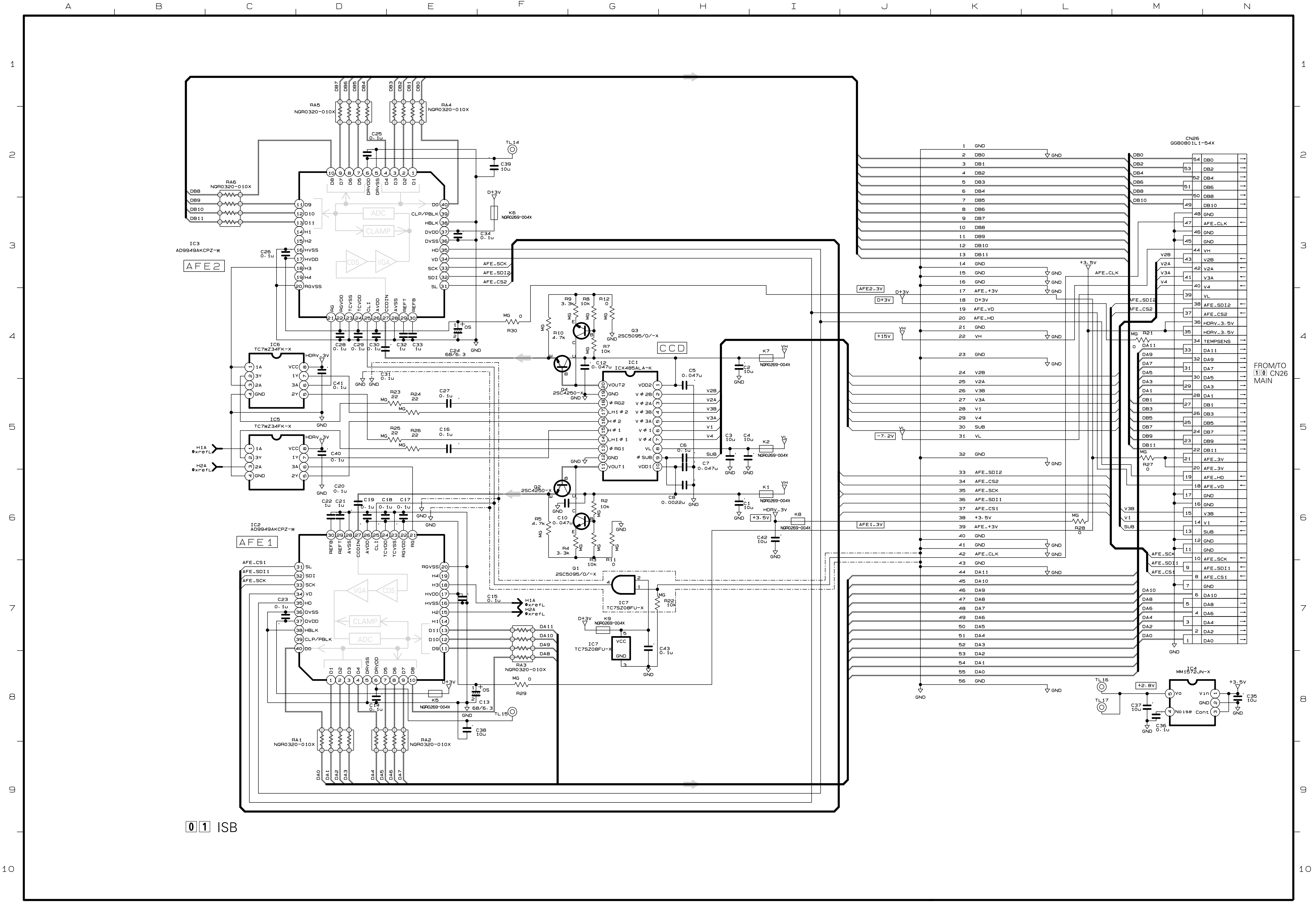
4.4 OVERALL WIRING DIAGRAM


VTR UNIT
LOADING MOTOR
DRUM MOTOR
CAPSTAN MOTOR
PRMDA PWB
ROTARY ENCODER
SUB DECK
CN70
CN71
CN72
CN73
CN74
CN75
CN16
CN17
PS PWB
CN1
CN29
CN30
CN53
BATTERY
DCI
DC INPUT (6-12V)
MAIN PWB
LENS
CN3
SD PWB
CN18
CCD UNIT
CN26
CN27
CN28
CN19
CN54
CN11
AJK
DVOUT PWB
JK
VP
TPA+
TPA-
TPB+
TPB-
GND
AUDIO CH1 OUT
AGND
AUDIO CH2 OUT
Board to Board
140P
CN49
CN4
KYE A
OPE PWB
VTR KEY
MIF PWB
CN34
SHIELD
VJK
CN48
FRL PWB
FOCUS_A_REC
CN8
FTY PWB
CN14
SPEAKER
EAR PWB
CN12
CN47
EARPHONE1
EARPHONE2
+3.3V
B TALLY CTL
AUDIO PWB
CN62
A
AVR PWB
GAIN AWB REC_SIDE
CH1 LEVEL
CH2 LEVEL
CN45
CN44
MOS PWB
MONITOR SELECT
VTR
DISPLAY
FULL AUTO
CN24
CN43
LINE SEL PWB
CN13
CN42
CN41
EJT PWB
FFC
XLR PWB
MIC_IN1
MIC_IN2
CN9
GAB PWB
AUTO WHITE
AWB
ZEBRA L
ZEBRA H
ZBR PWB
ZEBRA
CN10
CN90
FAN
FNC
CN22
CN23
VF_IF PWB
CN60
VFDR PWB
CN61
CN66
VF LCD
MONI BL PWB
CN63
CN64
MONITOR BACK LIGHT
MONITOR LCD
PBM PWB
FOCUS PEAKING BRIGHT MONITOR
CN55
USR PWB
USER1/2/3
CN50
MNU PWB
MENU
CN51
SET
STA PWB
STATUS ND_FILTER
CN52
P SW
SWP PWB
POWER

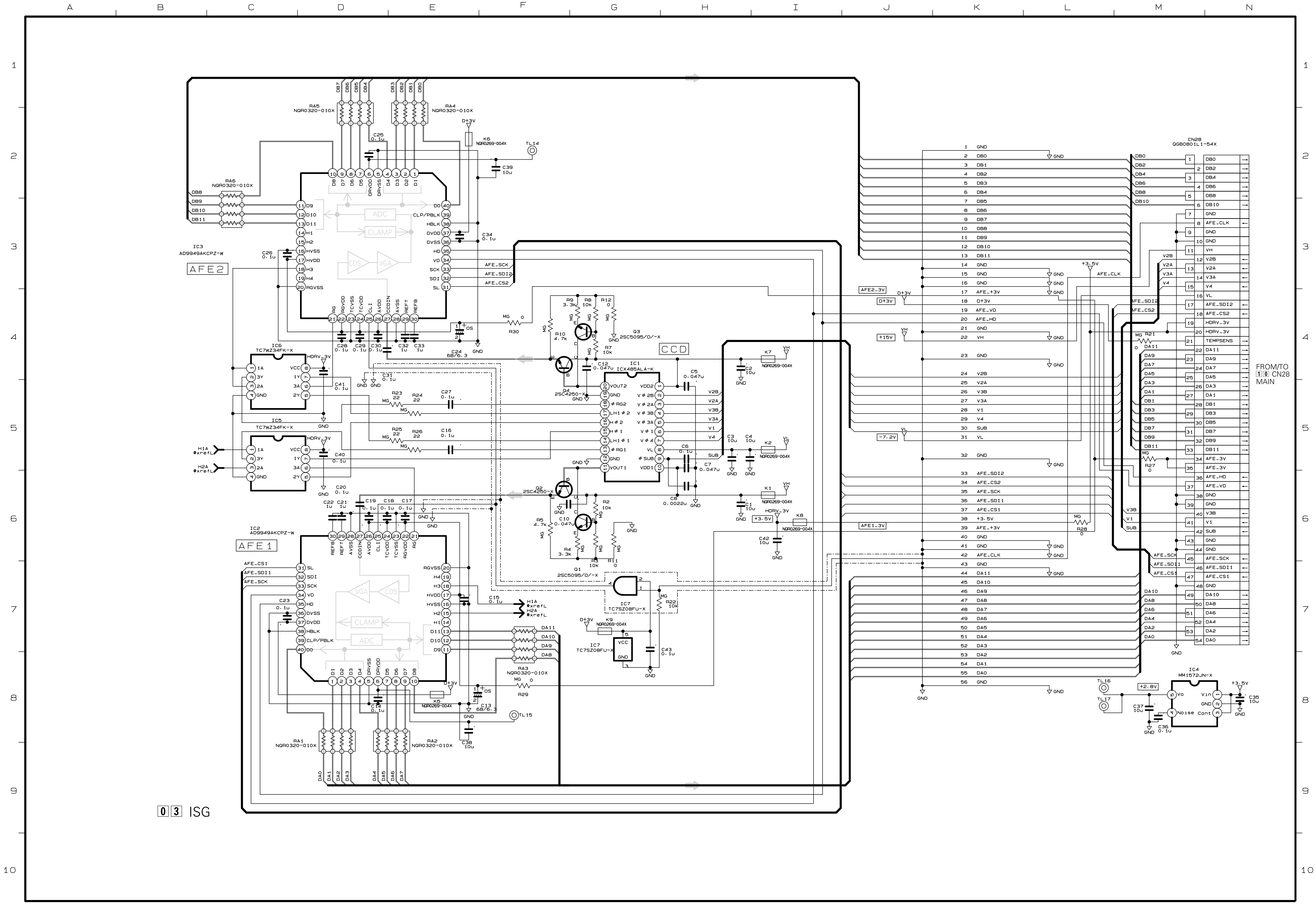
4.5 ISG SCHEMATIC DIAGRAM


A
B
C
D
E
F
G
H
I
J
K
L
M
N
1
2
3
4
5
6
7
8
9
10
IC3
AD9949AKCPZ-W
AFE2
IC2
AD9949AKCPZ-W
AFE1
ADC
CLAMP
CDS
VGA
IC1
ICX485ALA-K
CCD
IC5
TC7WZ34FK-X
IC6
TC7WZ34FK-X
IC7
TC7SZ08FU-X
IC4
MM1572JN-X
Q1
2SC5095/O/-X
Q2
2SC4250-X
Q3
2SC5095/O/-X
Q4
2SC4250-X
RA1
NQR0320-010X
RA2
NQR0320-010X
RA3
NQR0320-010X
RA4
NQR0320-010X
RA5
NQR0320-010X
RA6
NQR0320-010X
K1
K2
K5
K6
K7
K8
K9
NQR0269-004X
CN27
QGB0801L1-54X
FROM/TO
10 CN27
MAIN
H1A xrefL
H2A xrefL
TL14
TL15
TL16
TL17
D+3V
+3.5V
+15V
-7.2V
+2.8V
HDRV_3V
HDRV_3.5V
AFE2_3V
AFE1_3V
AFE_SCK
AFE_SDI1
AFE_SDI2
AFE_CS1
AFE_CS2
AFE_CLK
AFE_VD
AFE_HD
AFE_+3V
V2B
V2A
V3B
V3A
V1
V4
SUB
VL
VH
GND
TEMPSENS
DB0
DB1
DB2
DB3
DB4
DB5
DB6
DB7
DB8
DB9
DB10
DB11
DA0
DA1
DA2
DA3
DA4
DA5
DA6
DA7
DA8
DA9
DA10
DA11
02 ISG

4.6 ISB SCHEMATIC DIAGRAM


A B C D E F G H I J K L M N
1 2 3 4 5 6 7 8 9 10
IC3
AD9949AKCPZ-W
AFE2
IC2
AD9949AKCPZ-W
AFE1
IC1
ICX485ALA-K
CCD
IC6
TC7WZ34FK-X
IC5
TC7WZ34FK-X
IC7
TC7SZ08FU-X
IC4
MM1572JN-X
Q1
2SC5095/O/-X
Q2
2SC4250-X
Q3
2SC5095/O/-X
Q4
2SC4250-X
RA1 NQR0320-010X
RA2 NQR0320-010X
RA3 NQR0320-010X
RA4 NQR0320-010X
RA5 NQR0320-010X
RA6 NQR0320-010X
K1 NQR0269-004X
K2 NQR0269-004X
K5 NQR0269-004X
K6 NQR0269-004X
K7 NQR0269-004X
K8 NQR0269-004X
K9 NQR0269-004X
TL14
TL15
TL16
TL17
H1A xrefL
H2A xrefL
CN26
QGB0801L1-54X
1 GND
2 DB0
3 DB1
4 DB2
5 DB3
6 DB4
7 DB5
8 DB6
9 DB7
10 DB8
11 DB9
12 DB10
13 DB11
14 GND
15 GND
16 GND
17 AFE_+3V
18 D+3V
19 AFE_VD
20 AFE_HD
21 GND
22 VH
23 GND
24 V2B
25 V2A
26 V3B
27 V3A
28 V1
29 V4
30 SUB
31 VL
32 GND
33 AFE_SDI2
34 AFE_CS2
35 AFE_SCK
36 AFE_SDI1
37 AFE_CS1
38 +3.5V
39 AFE_+3V
40 GND
41 GND
42 AFE_CLK
43 GND
44 DA11
45 DA10
46 DA9
47 DA8
48 DA7
49 DA6
50 DA5
51 DA4
52 DA3
53 DA2
54 DA1
55 DA0
56 GND
AFE2_3V
D+3V
+15V
-7.2V
+3.5V
AFE1_3V
+2.8V
FROM/TO
10 CN26
MAIN
01 ISB

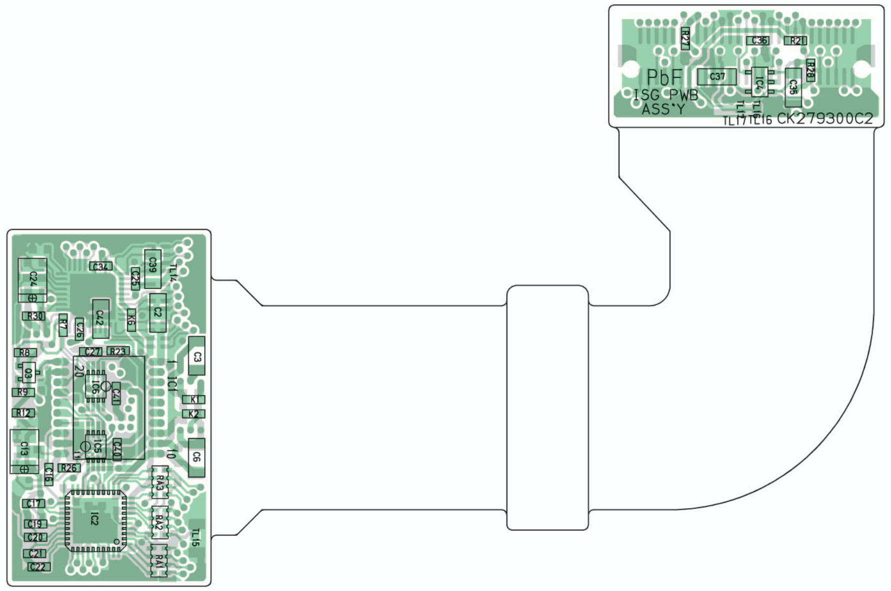
4.7 ISR SCHEMATIC DIAGRAM


A B C D E F G H I J K L M N
1 2 3 4 5 6 7 8 9 10
IC3
AD9949AKCPZ-W
AFE2
IC2
AD9949AKCPZ-W
AFE1
ADC
CLAMP
CDS
VGA
RA5
NQR0320-010X
RA4
NQR0320-010X
RA6
NQR0320-010X
RA1
NQR0320-010X
RA2
NQR0320-010X
RA3
NQR0320-010X
IC6
TC7WZ34FK-X
IC5
TC7WZ34FK-X
IC1
ICX485ALA-K
CCD
Q1
2SC5095/O/-X
Q2
2SC4250-X
Q3
2SC5095/O/-X
Q4
2SC4250-X
IC7
TC7SZ08FU-X
IC4
MM1572JN-X
CN28
QGB0801L1-54X
FROM/TO
10 CN28
MAIN
H1A
xrefL
H2A
xrefL
TL14
TL15
TL16
TL17
K1
K2
K5
K6
K7
K8
K9
NQR0269-004X
D+3V
+3.5V
+15V
-7.2V
+2.8V
AFE2_3V
AFE1_3V
HDRV_3V
VH
VL
GND
MG
SUB
AFE_SCK
AFE_SDI1
AFE_SDI2
AFE_CS1
AFE_CS2
AFE_CLK
AFE_VD
AFE_HD
TEMPSENS
03 ISG

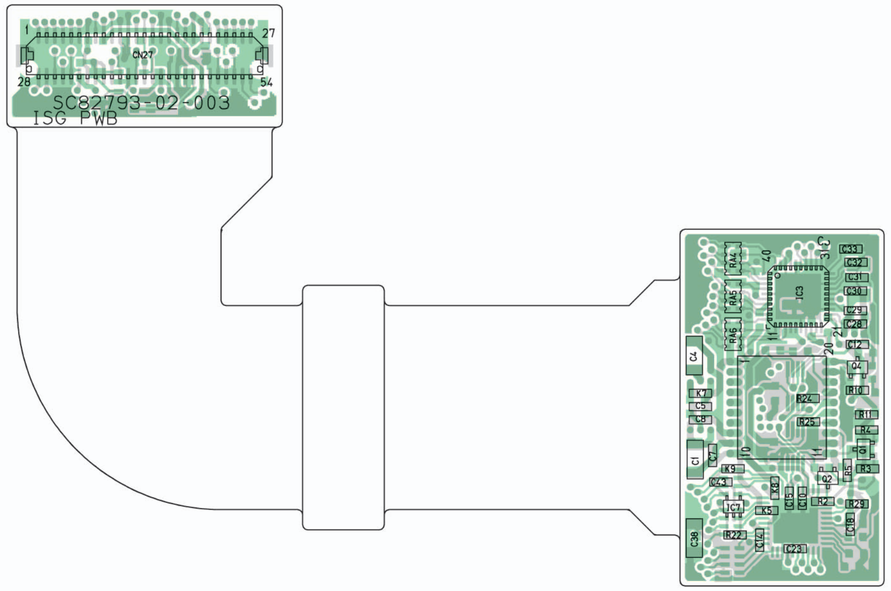
4.8 ISG, ISB, ISR CIRCUIT BOARDS

– ISG –

– SIDE A –

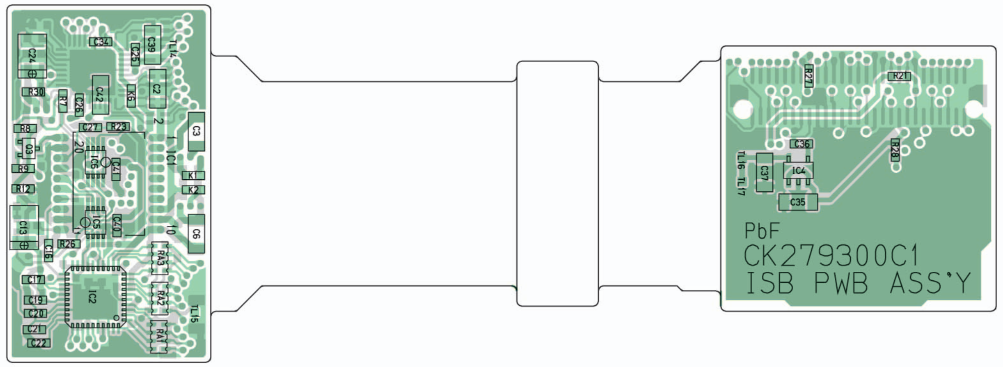

PbF
ISG PWB
ASS'Y
CK279300C2

– SIDE B –

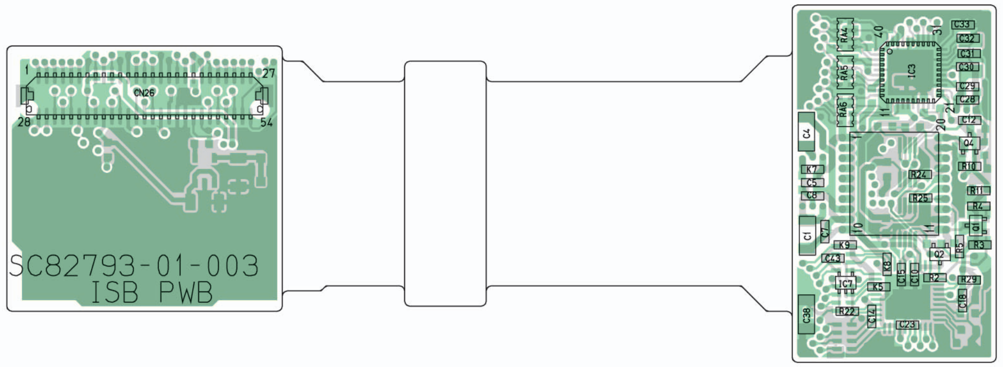

SC82793-02-003
ISG PWB

– ISB –

– SIDE A –

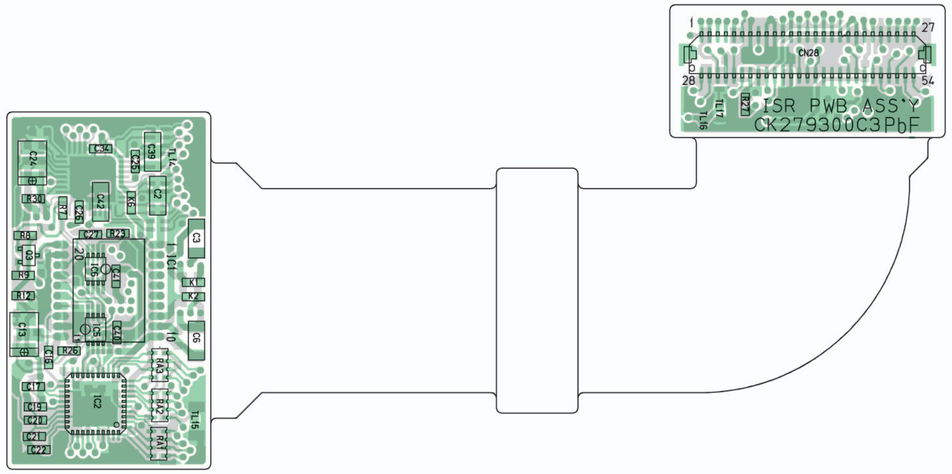

PbF
CK279300C1
ISB PWB ASS'Y

– SIDE B –

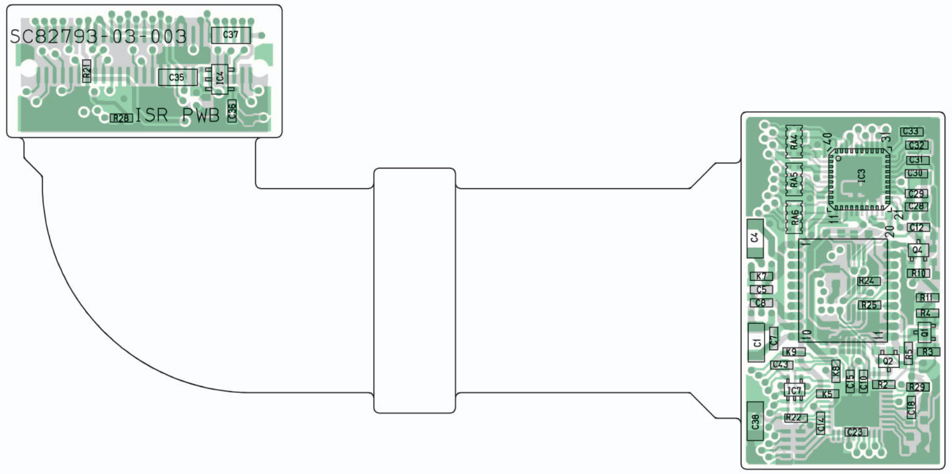

SC82793-01-003
ISB PWB

– ISR –

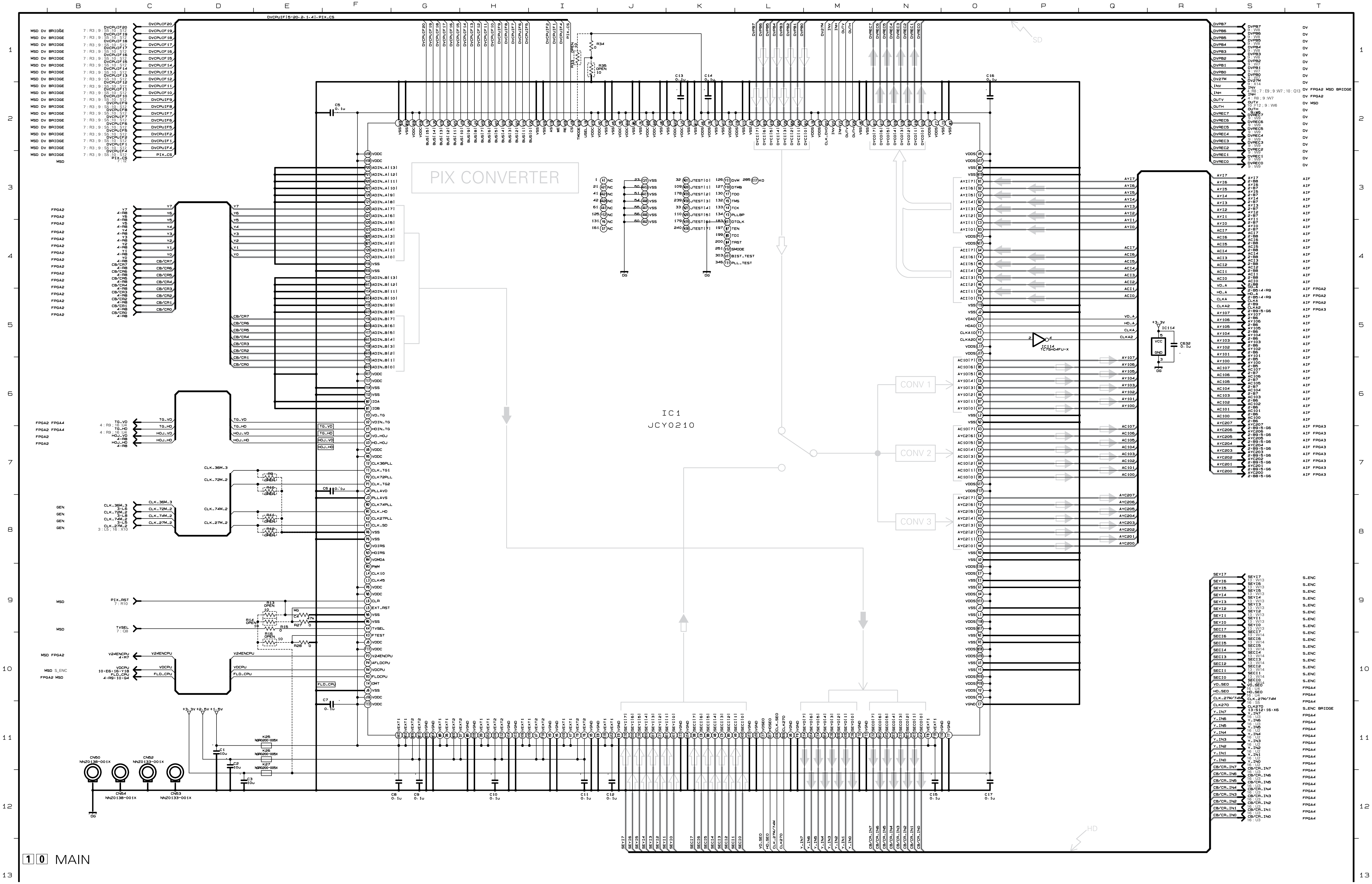
– SIDE A –


ISR PWB ASS'Y
CK279300C3PbF

– SIDE B –

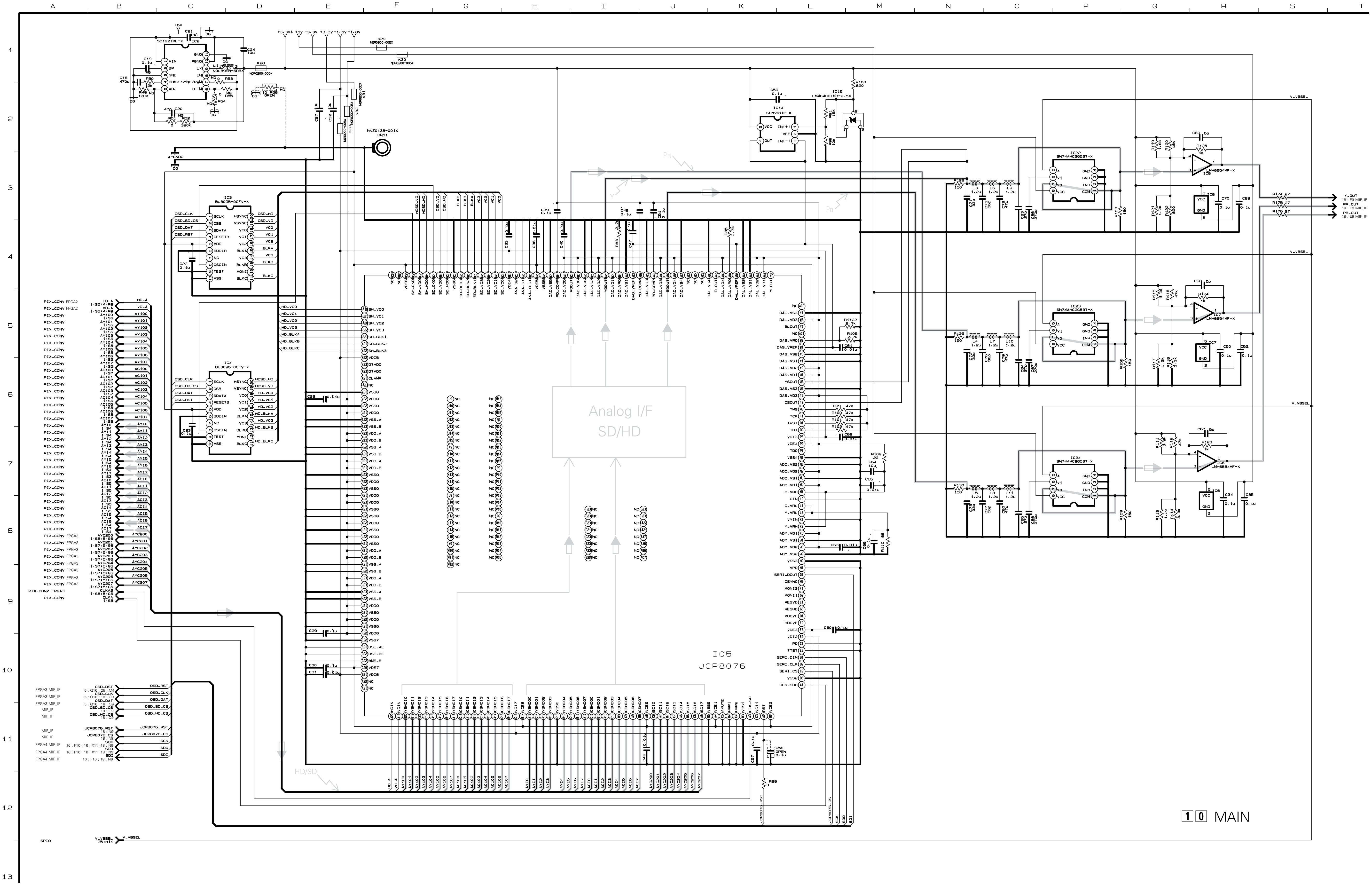

SC82793-03-003
ISR PWB

4.9 MAIN SCHEMATIC DIAGRAMS (1/18) (Pixel CONV)



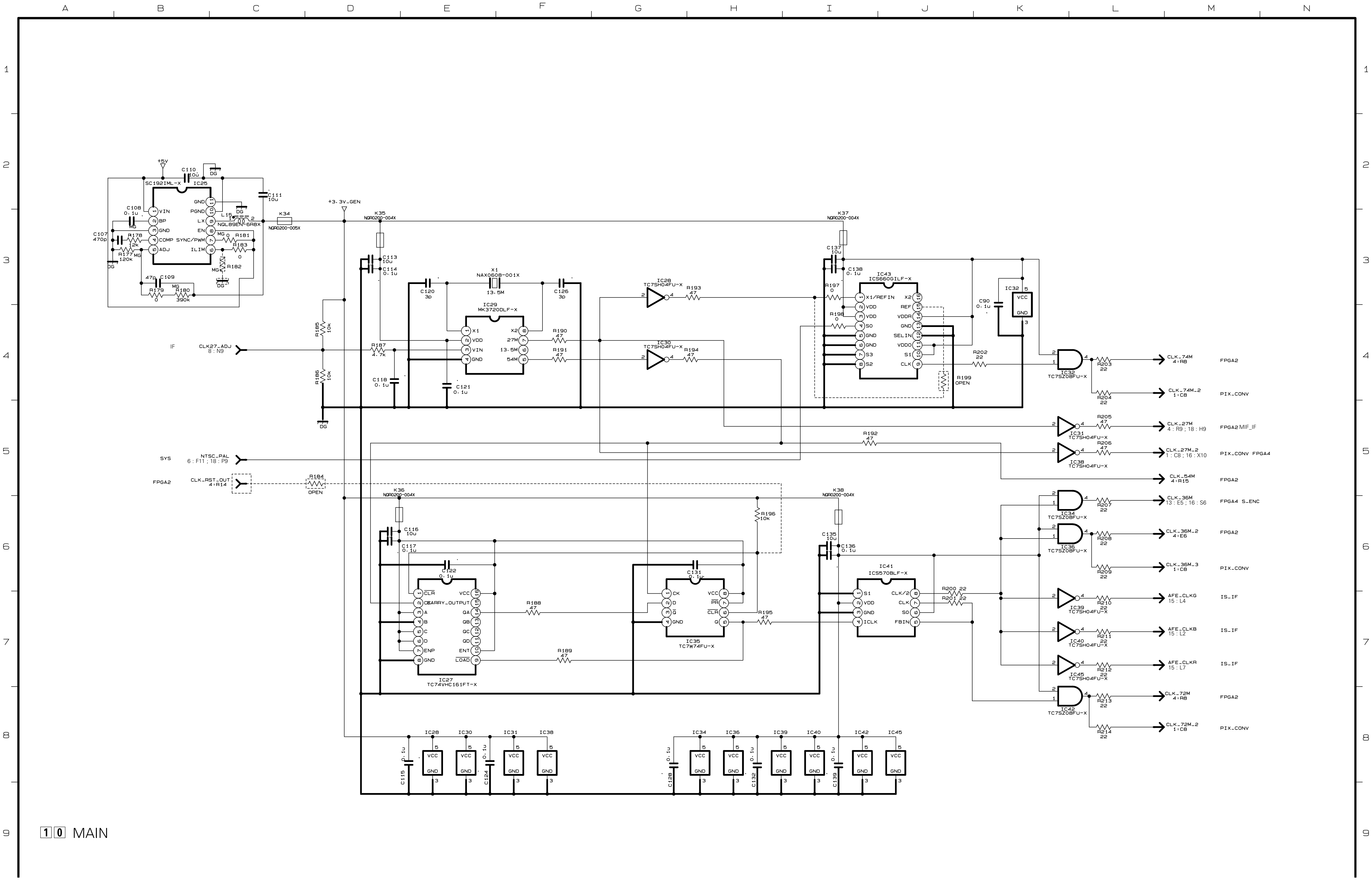
PIX CONVERTER
IC1
JCY0210
CONV 1
CONV 2
CONV 3
SD
HD
IC114
TC7SH04FU-X
DVCPUIF[5-20.2.1.4]-PIX_CS
MSD DV BRIDGE
FPGA2
FPGA4
GEN
MSD
S_ENC
AIF
DV
CN50
NNZ0138-001X
CN52
NNZ0133-001X
CN54
NNZ0138-001X
CN53
NNZ0133-001X
+3.3V
+2.5V
+1.5V
DG
10 MAIN

— MAIN SCHEMATIC DIAGRAMS (2/18) — (Analog I/F)

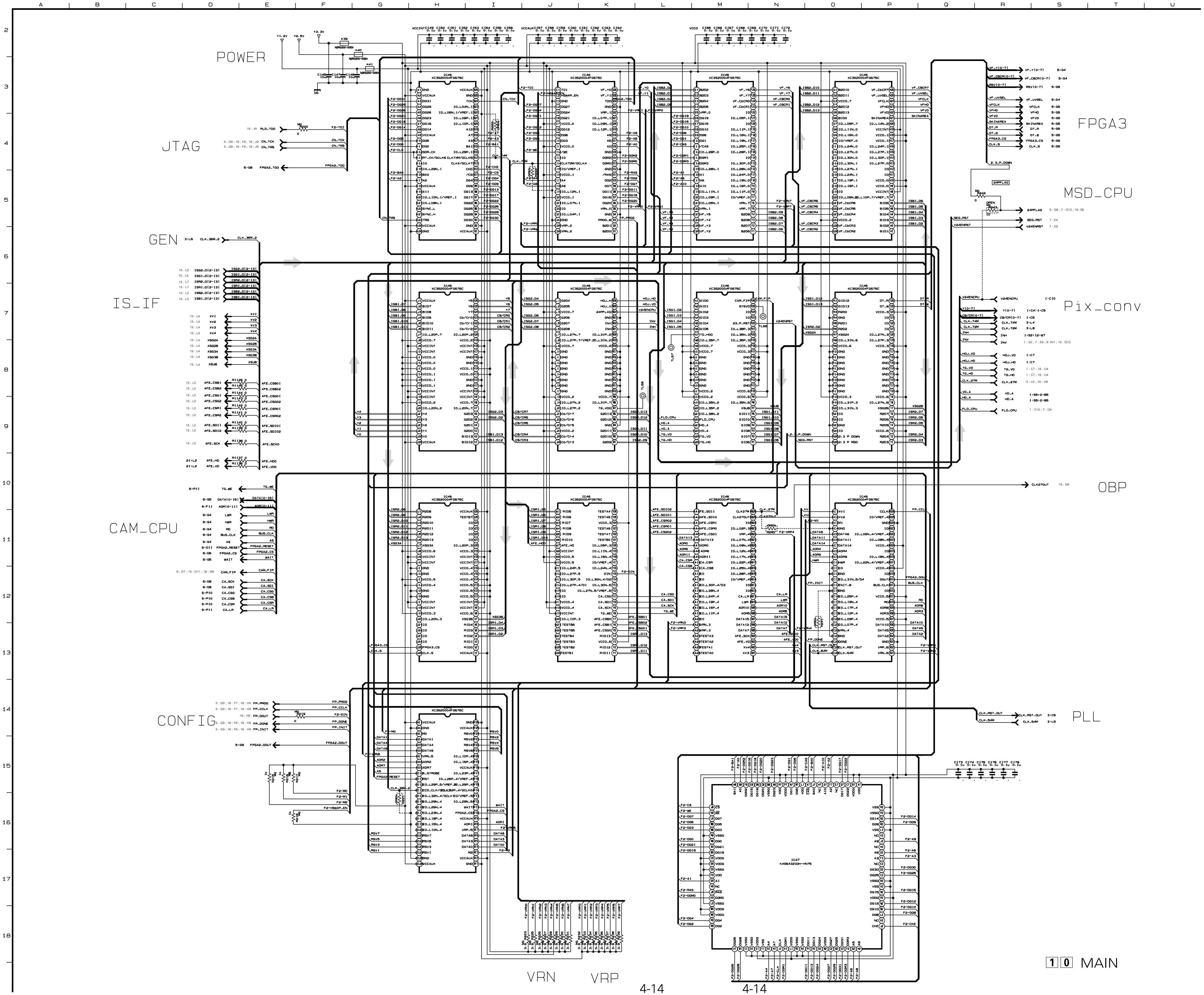


A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P
Q
R
S
T
1
2
3
4
5
6
7
8
9
10
11
12
13
SC1921ML-X
IC2
IC3
BU3095-0CFV-X
IC4
BU3095-0CFV-X
NNZ0138-001X
CN51
IC14
TA75S01F-X
IC15
LM4040CIM3-2.5X
IC22
SN74AHC2G53T-X
IC23
SN74AHC2G53T-X
IC24
SN74AHC2G53T-X
IC8
LMH6654MF-X
IC7
LMH6654MF-X
IC6
LMH6654MF-X
V_VBSEL
Y_OUT
PB_OUT
PR_OUT
Analog I/F
SD/HD
IC5
JCP8076
HD/SD
PR
PB
Y
OSD_RST
OSD_CLK
OSD_DAT
OSD_SD_CS
OSD_HD_CS
JCP8076_RST
JCP8076_CS
SCK
SDO
SDI
PIX_CONV
SPIO
1 0 MAIN

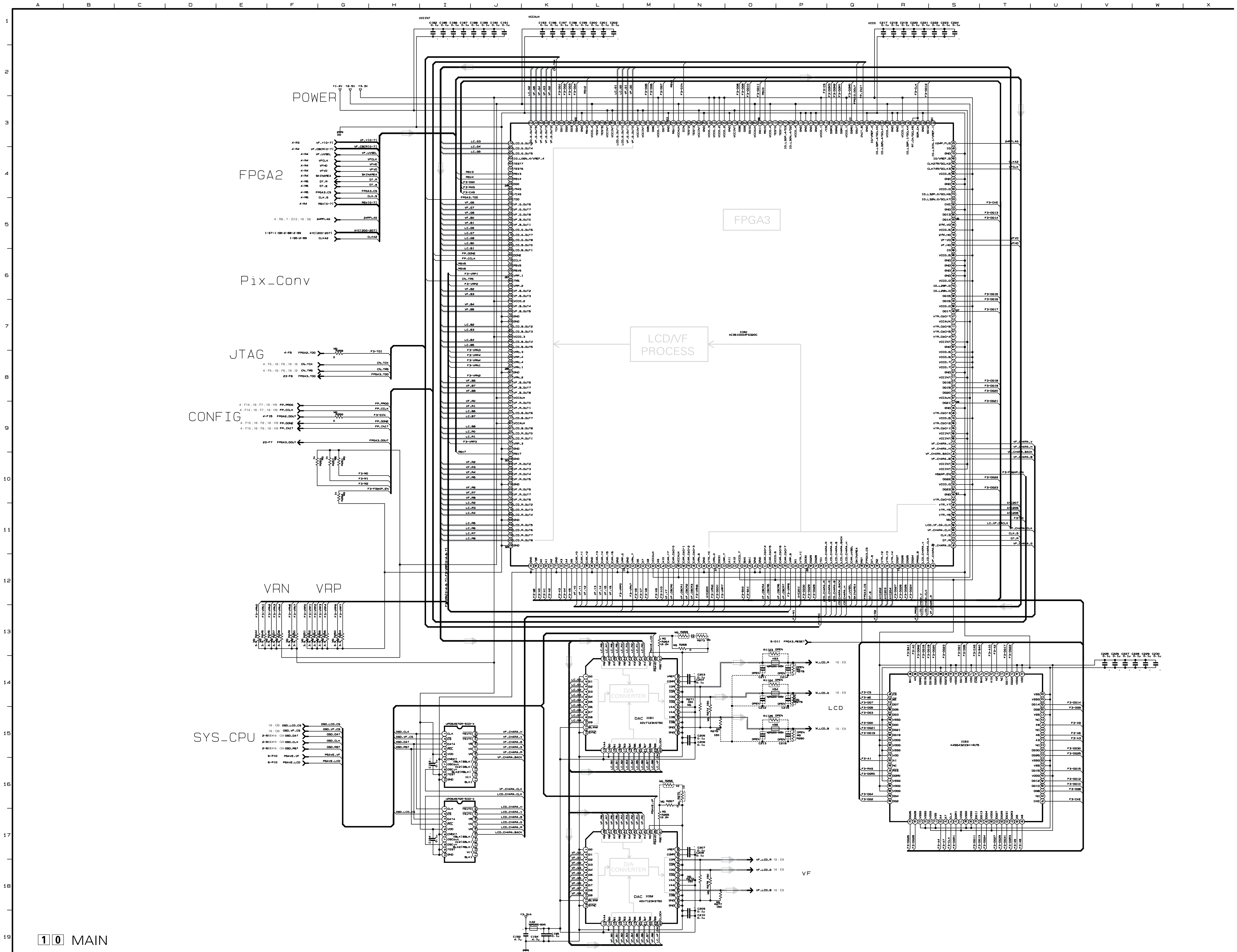
– MAIN SCHEMATIC DIAGRAMS (3/18) – (GEN)


A
B
C
D
E
F
G
H
I
J
K
L
M
N
1
2
3
4
5
6
7
8
9
+5V
C110
10u
DG
SC192IML-X
IC25
C111
10u
GND
PGND
LX
EN
SYNC/PWM
ILIM
VIN
BP
GND
COMP
ADJ
C108
0.1u
MG
C107
470p
R178
12k
R177
120k
L15
NQL89EN-6R8X
K34
NQR0200-005X
R181
0
R183
0
R182
47p
C109
R179
0
R180
390k
+3.3V_GEN
K35
NQR0200-004X
C113
10u
C114
0.1u
R185
10k
R186
10k
IF
CLK27_ADJ
8 : N9
R187
4.7k
C118
0.1u
C120
3p
X1
NAX0608-001X
13.5M
C126
3p
IC29
MK3720DLF-X
X1
VDD
VIN
GND
X2
27M
13.5M
54M
C121
0.1u
R190
47
R191
47
IC28
TC7SH04FU-X
R193
47
IC30
TC7SH04FU-X
R194
47
K37
NQR0200-004X
C137
10u
C138
0.1u
IC43
ICS660GILF-X
R197
0
R198
0
X1/REFIN
VDD
VDD
S0
GND
GND
S3
S2
X2
REF
VDDR
GND
SELIN
VDDO
S1
CLK
R199
OPEN
C90
0.1u
IC32
VCC
GND
R202
22
IC32
TC7SZ08FU-X
R203
22
CLK_74M
4 : R8
FPGA2
R204
22
CLK_74M_2
1 : C8
PIX_CONV
R205
47
IC31
TC7SH04FU-X
CLK_27M
4 : R9 ; 18 : H9
FPGA2 MIF_IF
R206
47
IC38
TC7SH04FU-X
CLK_27M_2
1 : C8 ; 16 : X10
PIX_CONV FPGA4
R192
47
CLK_54M
4 : R15
FPGA2
SYS
NTSC_PAL
6 : F11 ; 18 : P9
FPGA2
CLK_RST_OUT
4 : R14
R184
OPEN
K36
NQR0200-004X
K38
NQR0200-004X
R196
10k
C116
10u
C117
0.1u
C122
0.1u
IC27
TC74VHC161FT-X
CLR
CK
A
B
C
D
ENP
GND
VCC
CARRY_OUTPUT
QA
QB
QC
QD
ENT
LOAD
R188
47
R189
47
C131
0.1u
IC35
TC7W74FU-X
CK
D
Q
GND
VCC
PR
CLR
Q
R195
47
C135
10u
C136
0.1u
IC41
ICS570BLF-X
S1
VDD
GND
ICLK
CLK/2
CLK
S0
FBIN
R200 22
R201 22
IC34
TC7SZ08FU-X
R207
22
CLK_36M
13 : E5 ; 16 : S6
FPGA4 S_ENC
IC36
TC7SZ08FU-X
R208
22
CLK_36M_2
4 : E6
FPGA2
R209
22
CLK_36M_3
1 : C8
PIX_CONV
IC39
TC7SH04FU-X
R210
22
AFE_CLKG
15 : L4
IS_IF
IC40
TC7SH04FU-X
R211
22
AFE_CLKB
15 : L2
IS_IF
IC45
TC7SH04FU-X
R212
22
AFE_CLKR
15 : L7
IS_IF
IC42
TC7SZ08FU-X
R213
22
CLK_72M
4 : R8
FPGA2
R214
22
CLK_72M_2
1 : C8
PIX_CONV
IC28
IC30
IC31
IC38
IC34
IC36
IC39
IC40
IC42
IC45
VCC
GND
C115
0.1u
C124
0.1u
C128
0.1u
C132
0.1u
C139
0.1u
10 MAIN

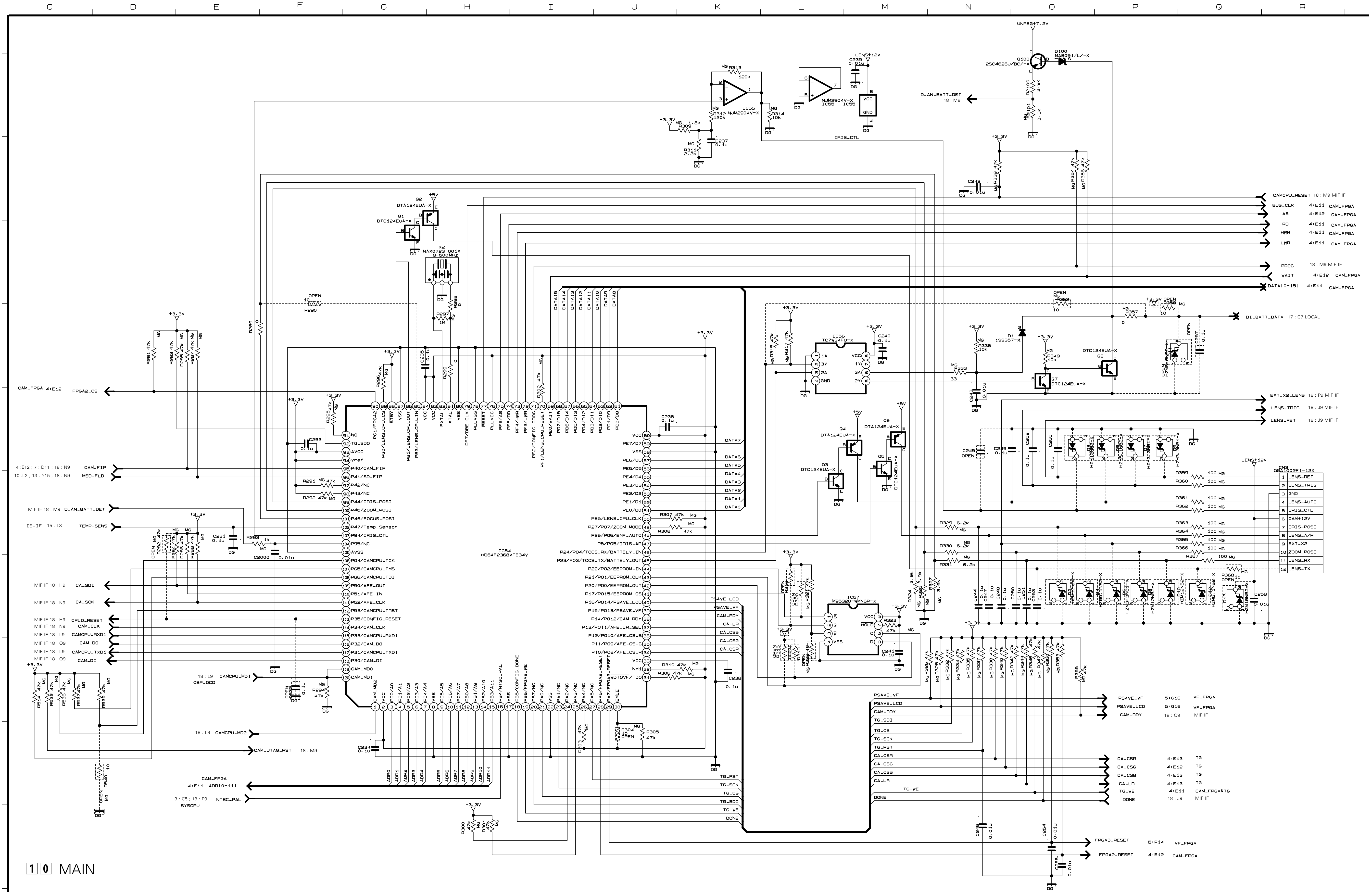
— MAIN SCHEMATIC DIAGRAMS (4/18) — (CAM FPGA-2)


POWER
JTAG
GEN
IS_IF
CAM_CPU
CONFIG
FPGA3
MSD_CPU
Pix_conv
OBP
PLL
VRN
VRP
IC45
XC3S2000-4FG676C
IC47
K4S643232H-HN75
1 0 MAIN

— MAIN SCHEMATIC DIAGRAMS (5/18) — (VF FPGA-3)

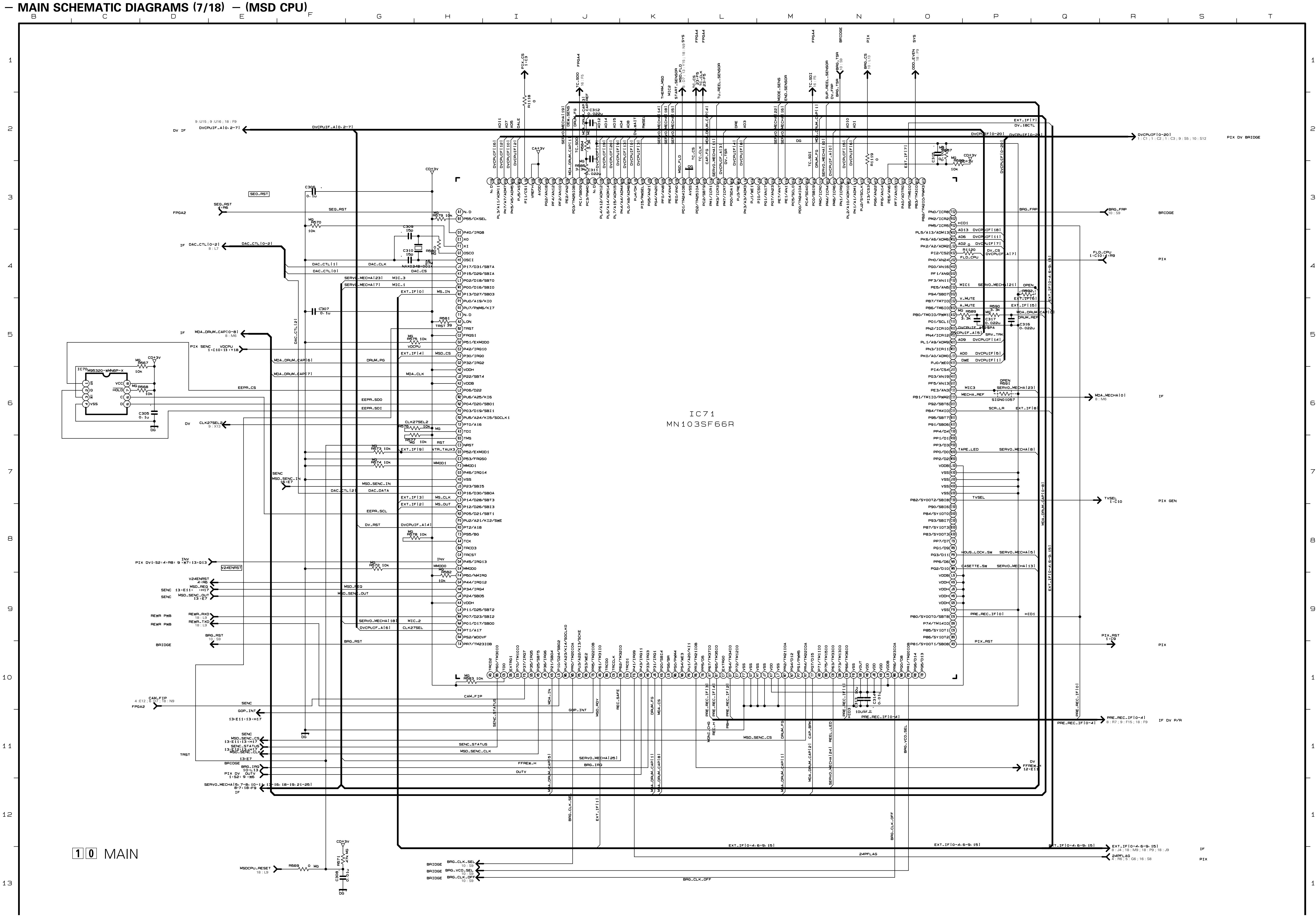

A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P
Q
R
S
T
U
V
W
X
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
POWER
FPGA2
Pix_Conv
JTAG
CONFIG
VRN
VRP
SYS_CPU
FPGA3
LCD/VF PROCESS
D/A CONVERTER
DAC
LCD
D/A CONVERTER
DAC
VF
1 0 MAIN

– MAIN SCHEMATIC DIAGRAMS (6/18) – (CAM CPU)

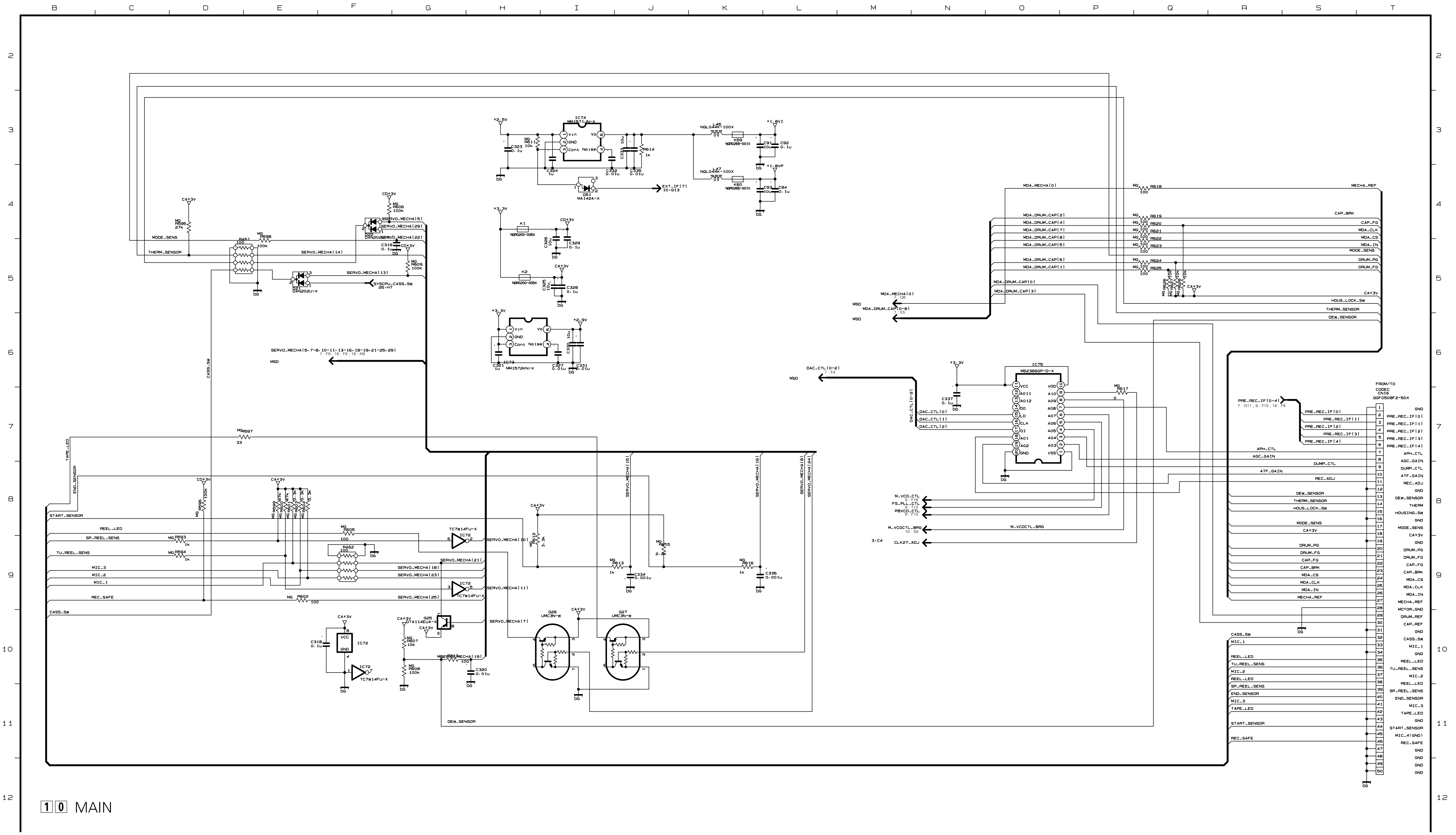


C
D
E
F
G
H
I
J
K
L
M
N
O
P
Q
R
2
3
4
5
6
7
8
9
10
11
UNREG+7.2V
Q100
2SC4626J/BC/-X
D100
MA8091/L/-X
R2100 3.9k
R2101 3.3k
D_AN_BATT_DET 18 : M9
LENS+12V
C239 0.01u
IC55 NJM2904V-X
R313 120k
R312 120k
R314 10k
R309 1.8k
R311 2.2k
C237 0.1u
IRIS_CTL
+3.3V
C242 0.01u
R339 47k
R354 47k
R355 47k
CAMCPU_RESET 18 : M9 MIF IF
BUS_CLK 4 : E11 CAM_FPGA
AS 4 : E12 CAM_FPGA
RD 4 : E11 CAM_FPGA
HWR 4 : E11 CAM_FPGA
LWR 4 : E11 CAM_FPGA
PROG 18 : M9 MIF IF
WAIT 4 : E12 CAM_FPGA
DATA[0-15] 4 : E11 CAM_FPGA
Q2 DTA124EUA-X
Q1 DTC124EUA-X
X2 NAX0723-001X 9.500MHz
R290
R289
R297 1M
R298
R299
C235 0.1u
R296 47k
R295 47k
R302 47k
R281 47k
R283 47k
R285 47k
R287 47k
CAM_FPGA 4 : E12
FPGA2_CS
C233 0.1u
4 : E12 ; 7 : D11 ; 18 : N9 CAM_FIP
10 : L2 ; 13 : Y15 ; 18 : N9 MSD_FLD
R291 47k
R292 47k
MIF IF 18 : M9 D_AN_BATT_DET
IS_IF 15 : L3 TEMP_SENS
C231 0.1u
R293 1k
C2000 0.01u
R282 47k
R284 47k
R286 47k
R288 47k
MIF IF 18 : H9 CA_SDI
MIF IF 18 : N9 CA_SCK
MIF IF 18 : H9 CPLD_RESET
MIF IF 18 : N9 CAM_CLK
MIF IF 18 : L9 CAMCPU_RXD1
MIF IF 18 : O9 CAM_DO
MIF IF 18 : L9 CAMCPU_TXD1
MIF IF 18 : O9 CAM_DI
R514 47k
R532 47k
R536 47k
R537 47k
R539 47k
18 : L9 CAMCPU_MD1
OBP_OCD
R294 47k
18 : L9 CAMCPU_MD2
C234 0.1u
CAM_JTAG_RST 18 : M9
R540 10
CAM_FPGA 4 : E11 ADR[0-11]
3 : C5 ; 18 : P9 SYSCPU NTSC_PAL
R300 47k
R301 47k
IC54 HD64F2368VTE34V
NC
TG_SDO
AVCC
Vref
P40/CAM_FIP
P41/SD_FIP
P42/NC
P43/NC
P44/IRIS_POSI
P45/ZOOM_POSI
P46/FOCUS_POSI
P47/Temp_Sensor
P94/IRIS_CTL
P95/NC
AVSS
PG4/CAMCPU_TCK
PG5/CAMCPU_TMS
PG6/CAMCPU_TDI
P50/AFE_OUT
P51/AFE_IN
P52/AFE_CLK
P53/CAMCPU_TRST
P35/CONFIG_RESET
P34/CAM_CLK
P33/CAMCPU_RXD1
P32/CAM_DO
P31/CAMCPU_TXD1
P30/CAM_DI
CAM_MD0
CAM_MD1
VCC
PE7/D7
VSS
PE6/D6
PE5/D5
PE4/D4
PE3/D3
PE2/D2
PE1/D1
PE0/D0
P85/LENS_CPU_CLK
P27/PO7/ZOOM_MODE
P26/PO6/ENF_AUTO
P5/PO5/IRIS_AR
P24/PO4/TCCS_RX/BATTELY_IN
P23/PO3/TCCS_TX/BATTELY_OUT
P22/PO2/EEPROM_IN
P21/PO1/EEPROM_CLK
P20/PO0/EEPROM_OUT
P17/PO15/EEPROM_CS
P16/PO14/PSAVE_LCD
P15/PO13/PSAVE_VF
P14/PO12/CAM_RDY
P13/PO11/AFE_LR_SEL
P12/PO10/AFE_CS_B
P11/PO9/AFE_CS_G
P10/PO8/AFE_CS_R
NMI
MDTOVF/TDO
PG1/FPGA2_CS
PG0/LENS_CPU_CS
STBY
PB1/LENS_CPU_OUT
PB3/LENS_CPU_IN
EXTAL
XTAL
PF7/OBE_CLK
PLLVSS
RESET
PLLVCC
PF6/AS
PF5/RD
PF4/HWR
PF3/LWR
PF2/CONFIG_PROG
PF1/LENS_CPU_RESET
PF0/WAIT
PD7/D15
PD6/D14
PD5/D13
PD4/D12
PD3/D11
PD2/D10
PD1/D9
PD0/D8
CAM_MD2
PC0/A0
PC1/A1
PC2/A2
PC3/A3
PC4/A4
PC5/A5
PC6/A6
PC7/A7
PB0/A8
PB1/A9
PB2/A10
PB3/A11
PB4/NTSC_PAL
PB5/CONFIG_DONE
PB6/FPGA2_WE
PB7/NC
PA0/NC
PA1/NC
PA2/NC
PA3/NC
PA4/NC
PA5/FPGA2_RESET
PA6/FPGA3_RESET
PA7/PSAVE_NC
EMLE
DATA0
DATA1
DATA2
DATA3
DATA4
DATA5
DATA6
DATA7
DATA8
DATA9
DATA10
DATA11
DATA12
DATA13
DATA14
DATA15
ADR0
ADR1
ADR2
ADR3
ADR4
ADR5
ADR6
ADR7
ADR8
ADR9
ADR10
ADR11
C236 0.1u
R307 47k
R308 47k
R310 47k
R306 47k
C238 0.1u
R303 47k
R304 10 OPEN
R305 47k
IC56 TC7W34FU-X
C240 0.1u
R315 47k
R317 47k
R333 33
R336 10k
D1 1SS357-X
R349 10k
Q7 DTC124EUA-X
Q8 DTC124EUA-X
C243 0.01u
R352 OPEN
R357 0
R358 OPEN
C257 0.1u
DI_BATT_DATA 17 : C7 LOCAL
EXT_X2_LENS 18 : P9 MIF IF
LENS_TRIG 18 : J9 MIF IF
LENS_RET 18 : J9 MIF IF
Q4 DTA124EUA-X
Q6 DTA124EUA-X
Q3 DTC124EUA-X
Q5 DTC124EUA-X
C245 OPEN
C249 0.1u
C252 0.1u
C255 0.1u
LENS+12V
CN3 QGA1002F1-12X
LENS_RET
LENS_TRIG
GND
LENS_AUTO
IRIS_CTL
CAM+12V
IRIS_POSI
LENS_A/R
EXT_X2
ZOOM_POSI
LENS_RX
LENS_TX
R359 100
R360 100
R361 100
R362 100
R363 100
R364 100
R365 100
R366 100
R367 100
R368 OPEN
R329 6.2k
R330 6.2k
R331 6.2k
R324 3.9k
R326 3.9k
R327 3.9k
IC57 M95320-WMN6P-X
R323 47k
C241 0.1u
C244 0.1u
C247 0.1u
C248 0.1u
C250 0.1u
C251 0.1u
C253 0.1u
C258 0.01u
PSAVE_LCD
PSAVE_VF
CAM_RDY
CA_LR
CA_CSB
CA_CSG
CA_CSR
TG_RST
TG_SCK
TG_CS
TG_SDI
TG_WE
DONE
PSAVE_VF 5 : G16 VF_FPGA
PSAVE_LCD 5 : G16 VF_FPGA
CAM_RDY 18 : O9 MIF IF
CA_CSR 4 : E13 TG
CA_CSG 4 : E12 TG
CA_CSB 4 : E13 TG
CA_LR 4 : E13 TG
TG_WE 4 : E11 CAM_FPGA&TG
DONE 18 : J9 MIF IF
C246 0.01u
C254 0.01u
FPGA3_RESET 5 : P14 VF_FPGA
FPGA2_RESET 4 : E12 CAM_FPGA
DG
MG
10 MAIN

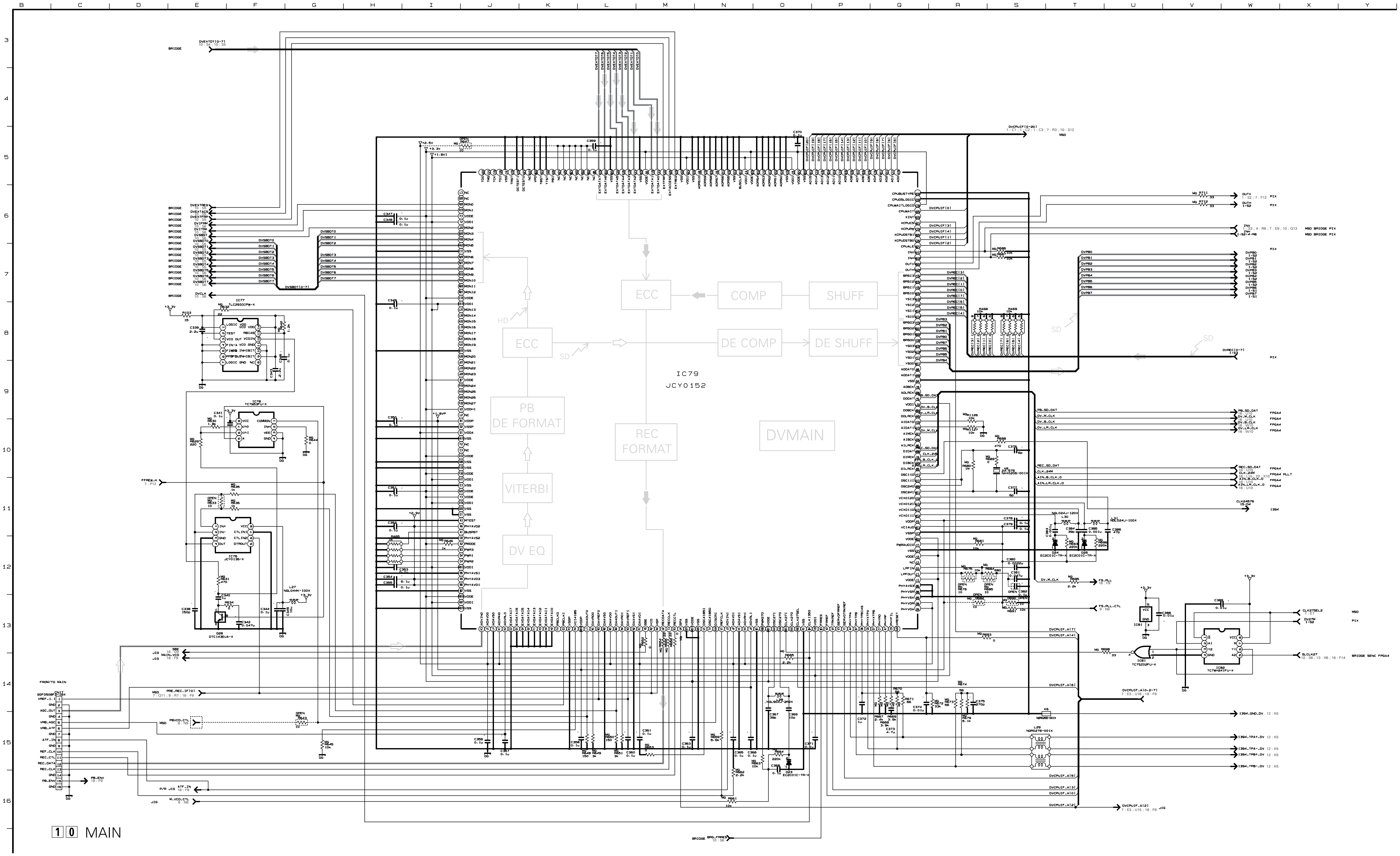
– MAIN SCHEMATIC DIAGRAMS (7/18) – (MSD CPU)


IC71
MN103SF66R
IC70 M95320-WMN6P-X
10 MAIN
DVCPUIF_A[0-2-7]
DVCPUIF[0-20]
PIX DV BRIDGE
SEQ_RST
DAC_CTL[0-2]
MDA_DRUM_CAP[0-8]
VDCPU
CLK27SEL2
V24ENRST
MSD_REG
MSD_SENC_OUT
REWR_RXD
REWR_TXD
BRG_RST
CAM_FIP
GOP_INT
MSD_SENC_CS
SENC_STATUS
MSD_SENC_CLK
BRG_IRQ
OUTV
SERVO_MECHA[5,7-8,10-13,15,16,18-19,21-25]
MSDCPU_RESET
BRG_CLK_SEL
BRG_VCO_SEL
BRG_CLK_OFF
BRG_FRP
FLD_CPU
MDA_MECHA[0]
TVSEL
PIX_RST
PRE_REC_IF[0-4]
FFREW_H
EXT_IF[0-4-6-9,15]
24PFLAG
PIX_CS
TC_SDO
TC_CS
TC_SCK
TC_SDI
TU_REEL_SENSOR
SUP_REEL_SENSOR
BRG_TSR
BRG_CS
ODD_EVEN
FPGA2
FPGA4
BRIDGE
PIX
SENC
IF
DV
TRST
PIX GEN
IF DV P/R

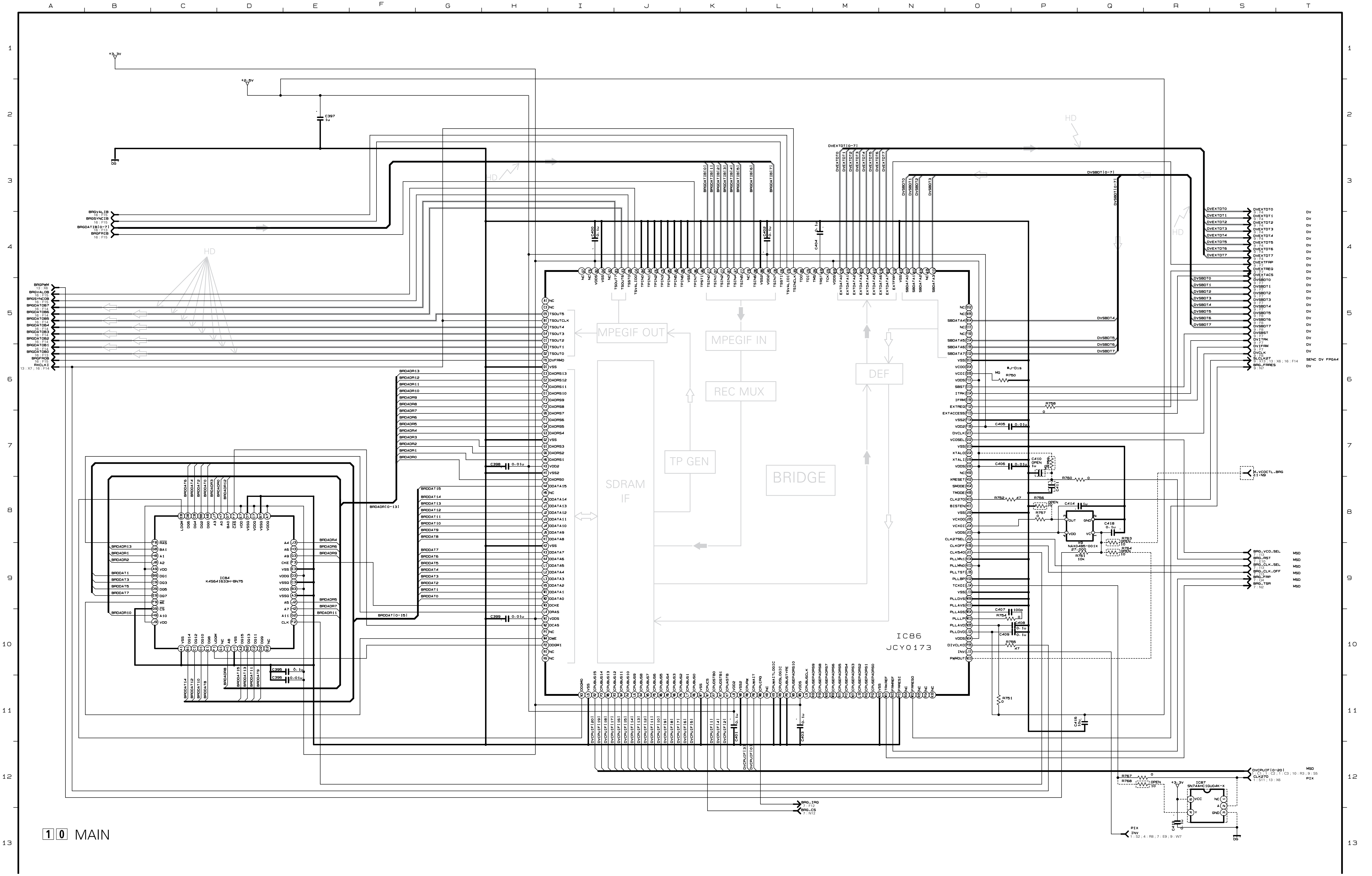
– MAIN SCHEMATIC DIAGRAMS (8/18) – (I/F)


B C D E F G H I J K L M N O P Q R S T
2 3 4 5 6 7 8 9 10 11 12
IC74 MM1571JN-X
+2.5V
C323 0.1u
MG R611 10k
C324 1u
C332 0.01u
C333 10u
C335 0.01u
R614 1k
D51 MA142A-X
EXT_IF[7] 10:Q13
L46 NQL044K-100X
K59 NQR0265-001X
+1.8VI
C91 10u
C92 0.1u
L47 NQL044K-100X
K60 NQR0265-001X
+1.8VP
C93 10u
C94 0.1u
+3.3V
K1 NQR0200-005X
CD+3V
C326 10u
C329 0.1u
K2 NQR0200-005X
CA+3V
C325 10u
C328 0.1u
IC73 MM1572KN-X
+2.9V
C321 1u
C327 0.01u
C330 10u
C331 0.01u
Vin GND Cont Noise Vo
DG
MODE_SENS
THERM_SENSOR
MG R595 27k
RA61 100
MG R598 100k
MG R606 100k
D22 DAN202U-X
SERVO_MECHA[5]
SERVO_MECHA[29]
SERVO_MECHA[22]
C319 0.1u
MG R609 100k
SERVO_MECHA[14]
SERVO_MECHA[13]
D21 DAN202U-X
SYSCPU_CASS_SW 25:H7
SERVO_MECHA[5-7-8-10-11-13-16-18-19-21-25-29] 7 : F9 ; 18 : F9 ; 18 : N9
MSD
CASS_SW
TAPE_LED
END_SENSOR
MG R597 33
START_SENSOR
REEL_LED
SP_REEL_SENS
TU_REEL_SENS
MIC_3
MIC_2
MIC_1
REC_SAFE
MG R596 100k
MG R593 1k
MG R594 1k
MG R599 47k
MG R600 47k
MG R601 3.3k
MG R603 3.3k
MG R604 3.3k
MG R605 100
RA62 100
MG R602 100
TC7W14FU-X IC72
SERVO_MECHA[10]
SERVO_MECHA[21]
SERVO_MECHA[18]
SERVO_MECHA[23]
SERVO_MECHA[11]
SERVO_MECHA[25]
SERVO_MECHA[7]
SERVO_MECHA[19]
Q25 DTA114EUA-X
C318 0.1u
VCC GND IC72
MG R607 10k
MG R608 100k
MG R610 100
C320 0.01u
DEW_SENSOR
MG R612 3.3k
MG R613 1k
C334 0.001u
MG R615 2.2k
MG R616 1k
C336 0.001u
SERVO_MECHA[15]
SERVO_MECHA[16]
SERVO_MECHA[8]
SERVO_MECHA[24]
Q26 UMC3N-W
Q27 UMC3N-W
MDA_MECHA[0]
MDA_DRUM_CAP[2]
MDA_DRUM_CAP[4]
MDA_DRUM_CAP[7]
MDA_DRUM_CAP[8]
MDA_DRUM_CAP[5]
MDA_DRUM_CAP[6]
MDA_DRUM_CAP[1]
MDA_DRUM_CAP[0]
MDA_DRUM_CAP[3]
MDA_MECHA[0] 7 : Q6
MDA_DRUM_CAP[0-8] 7 : E5
MG R618 100
MG R619 100
MG R620 100
MG R621 100
MG R622 100
MG R623 100
MG R624 100
MG R625 100
MG R626 10k
MG R627 10k
MG R628 10k
MECHA_REF
CAP_BRK
CAP_FG
MDA_CLK
MDA_CS
MDA_IN
DRUM_PG
DRUM_FG
HOUS_LOCK_SW
DAC_CTL[0-2] 7 : E4
DAC_CTL[0]
DAC_CTL[1]
DAC_CTL[2]
C337 0.1u
IC75 M62366GP-D-X
VCC A011 A012 DO LD CLK DI A01 A02 GND
VDD A10 A09 A08 A07 A06 A05 A04 A03 VSS
MG R617 0
M_VCO_CTL 9 : F16
FS_PLL_CTL 9 : T13
PBVCO_CTL 9 : F15
M_VCOCTL_BRG 10 : S8
3:C4
CLK27_ADJ
PRE_REC_IF[0-4] 7 : Q11 ; 9 : F15 ; 18 : F9
APH_CTL
AGC_GAIN
DUMP_CTL
ATF_GAIN
REC_ADJ
FROM/TO CODEC CN16 QGF0508F2-50X
1 GND
2 PRE_REC_IF[0]
3 PRE_REC_IF[1]
4 PRE_REC_IF[2]
5 PRE_REC_IF[3]
6 PRE_REC_IF[4]
7 APH_CTL
8 AGC_GAIN
9 DUMP_CTL
10 ATF_GAIN
11 REC_ADJ
12 GND
13 DEW_SENSOR
14 THERM
15 HOUSING_SW
16 GND
17 MODE_SENS
18 CA+3V
19 GND
20 DRUM_PG
21 DRUM_FG
22 CAP_FG
23 CAP_BRK
24 MDA_CS
25 MDA_CLK
26 MDA_IN
27 MECHA_REF
28 MOTOR_GND
29 DRUM_REF
30 CAP_REF
31 GND
32 CASS_SW
33 MIC_1
34 GND
35 REEL_LED
36 TU_REEL_SENS
37 MIC_2
38 REEL_LED
39 SP_REEL_SENS
40 END_SENSOR
41 MIC_3
42 TAPE_LED
43 GND
44 START_SENSOR
45 MIC_4(GND)
46 REC_SAFE
47 GND
48 GND
49 GND
50 GND
1 0 MAIN

– MAIN SCHEMATIC DIAGRAMS (9/18) – (DV MAIN)


IC79
JCY0152
DVMAIN
ECC
COMP
SHUFF
DE COMP
DE SHUFF
PB
DE FORMAT
REC
FORMAT
VITERBI
DV EQ
HD
SD
IC77
TLC2933IPW-X
IC78
TC7W53FU-X
IC75
JCY0136-X
Q28
DTC143EUA-X
IC81
TC7SZ02FU-X
IC82
TC7W241FU-X
L27
NQL044K-100X
L29
NQR0275-001X
BRIDGE
MSD
JIG
FPGA4
PIX
I394
FROM/TO MAIN
1 0 MAIN

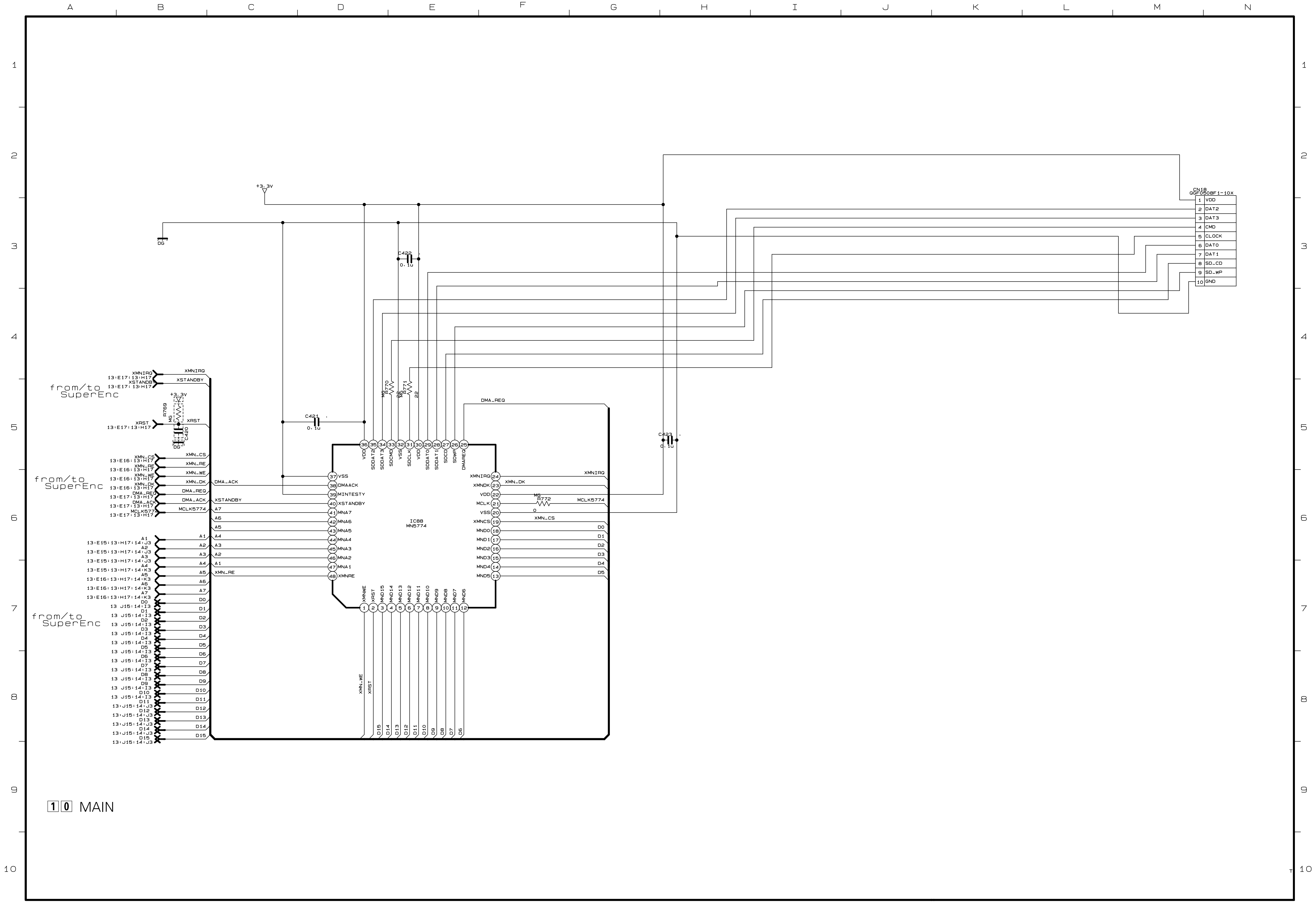
– MAIN SHEMATIC DIAGRAMS (10/18) – (BRIGE)



IC86
JCY0173
BRIDGE
SDRAM IF
MPEGIF OUT
MPEGIF IN
REC MUX
DEF
TP GEN
IC84
K4S641633H-BN75
IC87
SN74AHC1GU04K-X
X2
NAX0485-001X
27.000
+3.3V
+2.5V
DG
HD
BRGVALIB
BRGSYNCIB
BRGDATIB[0-7]
BRGFRIB
BRGPWM
BRGVALOB
BRGSYNCOB
BRGFROB
RXCLK1
DVEXTOT[0-7]
DVSBOT[0-7]
BRDADR[0-13]
BRDDAT[0-15]
DVCPUIF[0-20]
CLK270
BRG_IRQ
BRG_CS
BRG_VCO_SEL
BRG_RST
BRG_CLK_SEL
BRG_CLK_OFF
BRG_FRP
BRG_TSR
M_VCOCTL_BRG
SLCLK27
BRG_FRRES
PIX
INV
DV
MSD

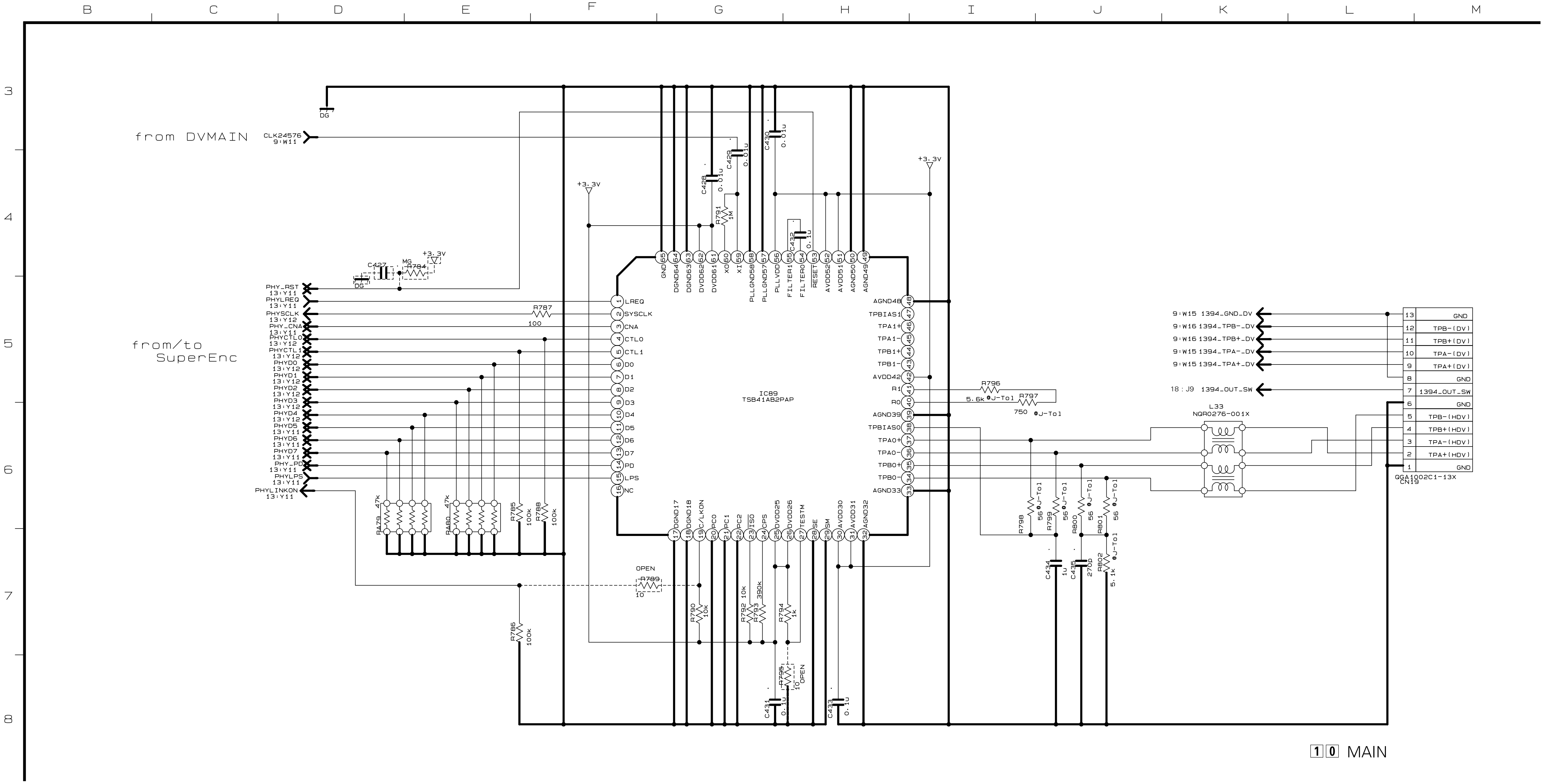
1 0 MAIN

– MAIN SCHEMATIC DIAGRAMS (11/18) – (SD I/F)

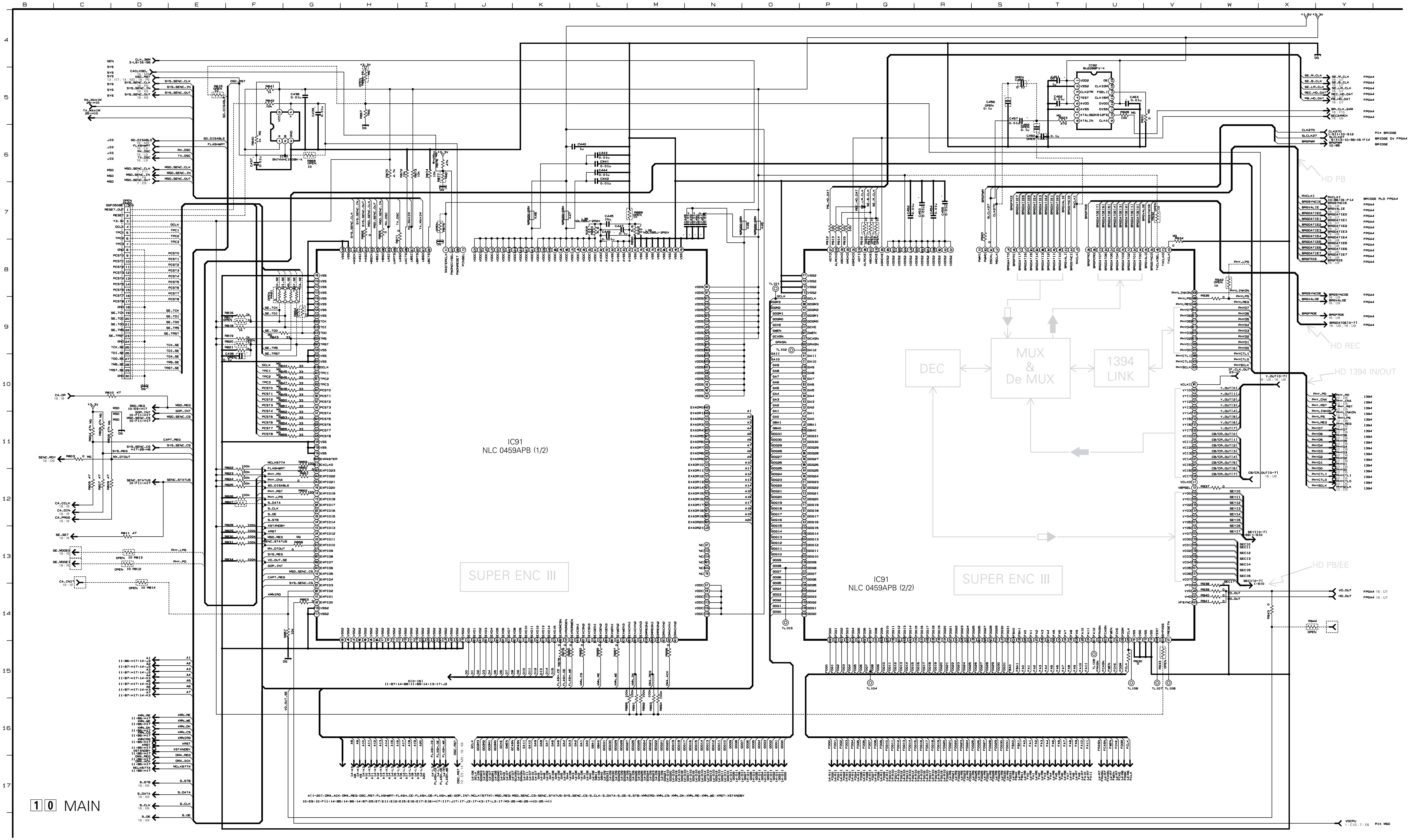


A
B
C
D
E
F
G
H
I
J
K
L
M
N
1
2
3
4
5
6
7
8
9
10
+3.3V
DG
C422
0.1u
C421
0.1u
C423
0.1u
CN18
QGF0508F1-10X
1 VDD
2 DAT2
3 DAT3
4 CMD
5 CLOCK
6 DAT0
7 DAT1
8 SD_CD
9 SD_WP
10 GND
MG
R770
22
MG
R771
22
DMA_REQ
from/to SuperEnc
XMNIRQ 13:E17:13:H17
XSTANDBY 13:E17:13:H17
XMNIRQ
XSTANDBY
+3.3V
R769
MG
C420
DG
XRST 13:E17:13:H17
XRST
from/to SuperEnc
XMN_CS 13:E16:13:H17
XMN_RE 13:E16:13:H17
XMN_WE 13:E16:13:H17
XMN_DK 13:E16:13:H17
DMA_REQ 13:E17:13:H17
DMA_ACK 13:E17:13:H17
MCLK5774 13:E17:13:H17
XMN_CS
XMN_RE
XMN_WE
XMN_DK
DMA_REQ
DMA_ACK
MCLK5774
DMA_ACK
XSTANDBY
A7
A6
A5
A4
A3
A2
A1
XMN_RE
A1 13:E15:13:H17:14:J3
A2 13:E15:13:H17:14:J3
A3 13:E15:13:H17:14:J3
A4 13:E15:13:H17:14:K3
A5 13:E16:13:H17:14:K3
A6 13:E16:13:H17:14:K3
A7 13:E16:13:H17:14:K3
from/to SuperEnc
D0 13 J15:14:I3
D1 13 J15:14:I3
D2 13 J15:14:I3
D3 13 J15:14:I3
D4 13 J15:14:I3
D5 13 J15:14:I3
D6 13 J15:14:I3
D7 13 J15:14:I3
D8 13 J15:14:I3
D9 13 J15:14:I3
D10 13 J15:14:I3
D11 13:J15:14:J3
D12 13:J15:14:J3
D13 13:J15:14:J3
D14 13:J15:14:J3
D15 13:J15:14:J3
A1
A2
A3
A4
A5
A6
A7
D0
D1
D2
D3
D4
D5
D6
D7
D8
D9
D10
D11
D12
D13
D14
D15
IC88
MN5774
36 VDD
35 SDDAT2
34 SDDAT3
33 SDCMD
32 VSS
31 SDCLK
30 VDD
29 SDDAT0
28 SDDAT1
27 SDCD
26 SDWP
25 DMAREQ
37 VSS
38 DMAACK
39 MINTESTY
40 XSTANDBY
41 MNA7
42 MNA6
43 MNA5
44 MNA4
45 MNA3
46 MNA2
47 MNA1
48 XMNRE
XMNIRQ 24
XMNDK 23
VDD 22
MCLK 21
VSS 20
XMNCS 19
MND0 18
MND1 17
MND2 16
MND3 15
MND4 14
MND5 13
1 XMNWE
2 XRST
3 MND15
4 MND14
5 MND13
6 MND12
7 MND11
8 MND10
9 MND9
10 MND8
11 MND7
12 MND6
XMNIRQ
XMN_DK
MG
R772
0
MCLK5774
XMN_CS
D0
D1
D2
D3
D4
D5
XMN_WE
XRST
D15
D14
D13
D12
D11
D10
D9
D8
D7
D6
10 MAIN

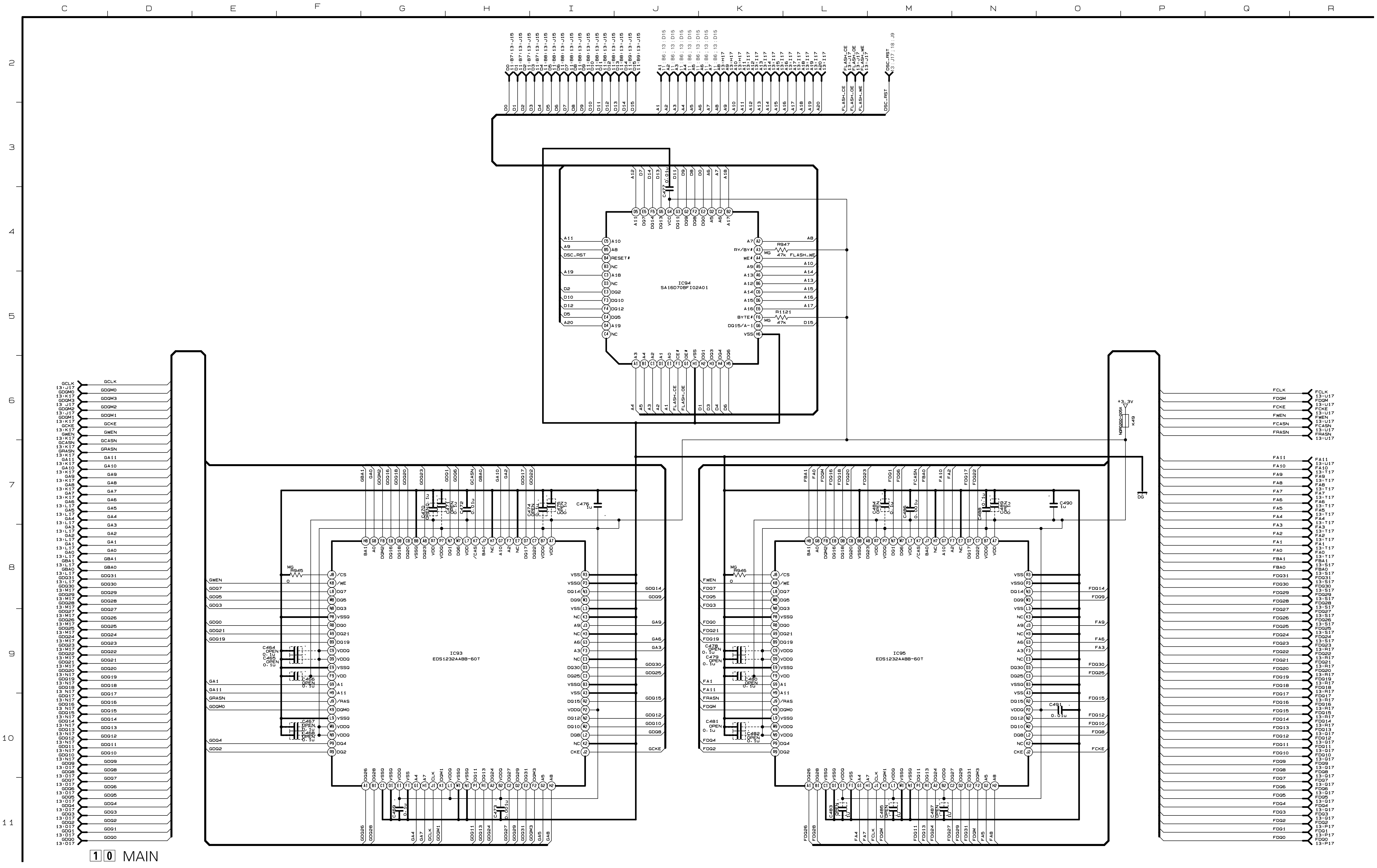
– MAIN SCHEMATIC DIAGRAMS (12/18) – (1394 PHY)


B
C
D
E
F
G
H
I
J
K
L
M
3
4
5
6
7
8
from DVMAIN
CLK24576
9:W11
from/to
SuperEnc
PHY_RST 13:Y11
PHYLREQ 13:Y11
PHYSCLK 13:Y12
PHY_CNA 13:Y11
PHYCTL0 13:Y12
PHYCTL1 13:Y12
PHYD0 13:Y12
PHYD1 13:Y12
PHYD2 13:Y12
PHYD3 13:Y12
PHYD4 13:Y12
PHYD5 13:Y11
PHYD6 13:Y11
PHYD7 13:Y11
PHY_PD 13:Y11
PHYLPS 13:Y11
PHYLINKON 13:Y11
DG
C427
MG
R784
+3.3V
R787
100
RA79 47k
RA80 47k
R785 100k
R788 100k
R786 100k
OPEN
R789
10
IC89
TSB41AB2PAP
LREQ
SYSCLK
CNA
CTL0
CTL1
D0
D1
D2
D3
D4
D5
D6
D7
PD
LPS
NC
GND
DGND64
DGND63
DVDD62
DVDD61
XO
XI
PLLGND58
PLLGND57
PLLVDD
FILTER1
FILTER0
RESET
AVDD52
AVDD51
AGND50
AGND49
AGND48
TPBIAS1
TPA1+
TPA1-
TPB1+
TPB1-
AVDD42
R1
R0
AGND39
TPBIAS0
TPA0+
TPA0-
TPB0+
TPB0-
AGND33
DGND17
DGND18
C/LKON
PC0
PC1
PC2
ISO
CPS
DVDD25
DVDD26
TESTM
SE
SM
AVDD30
AVDD31
AGND32
C428 0.01u
C429 0.01u
C430 0.01u
C432 0.1u
R791 1M
R790 10k
R792 10k
R793 390k
R794 1k
R795 10 OPEN
C431 0.1u
C433 0.1u
R796 5.6k J-Tol
R797 750 J-Tol
R798 56 J-Tol
R799 56 J-Tol
R800 56 J-Tol
R801 56 J-Tol
R802 5.1k J-Tol
C434 1u
C435 270p
9:W15 1394_GND_DV
9:W16 1394_TPB-_DV
9:W16 1394_TPB+_DV
9:W15 1394_TPA-_DV
9:W15 1394_TPA+_DV
18 : J9 1394_OUT_SW
L33
NQR0276-001X
13 GND
12 TPB-(DV)
11 TPB+(DV)
10 TPA-(DV)
9 TPA+(DV)
8 GND
7 1394_OUT_SW
6 GND
5 TPB-(HDV)
4 TPB+(HDV)
3 TPA-(HDV)
2 TPA+(HDV)
1 GND
QGA1002C1-13X
CN19
10 MAIN

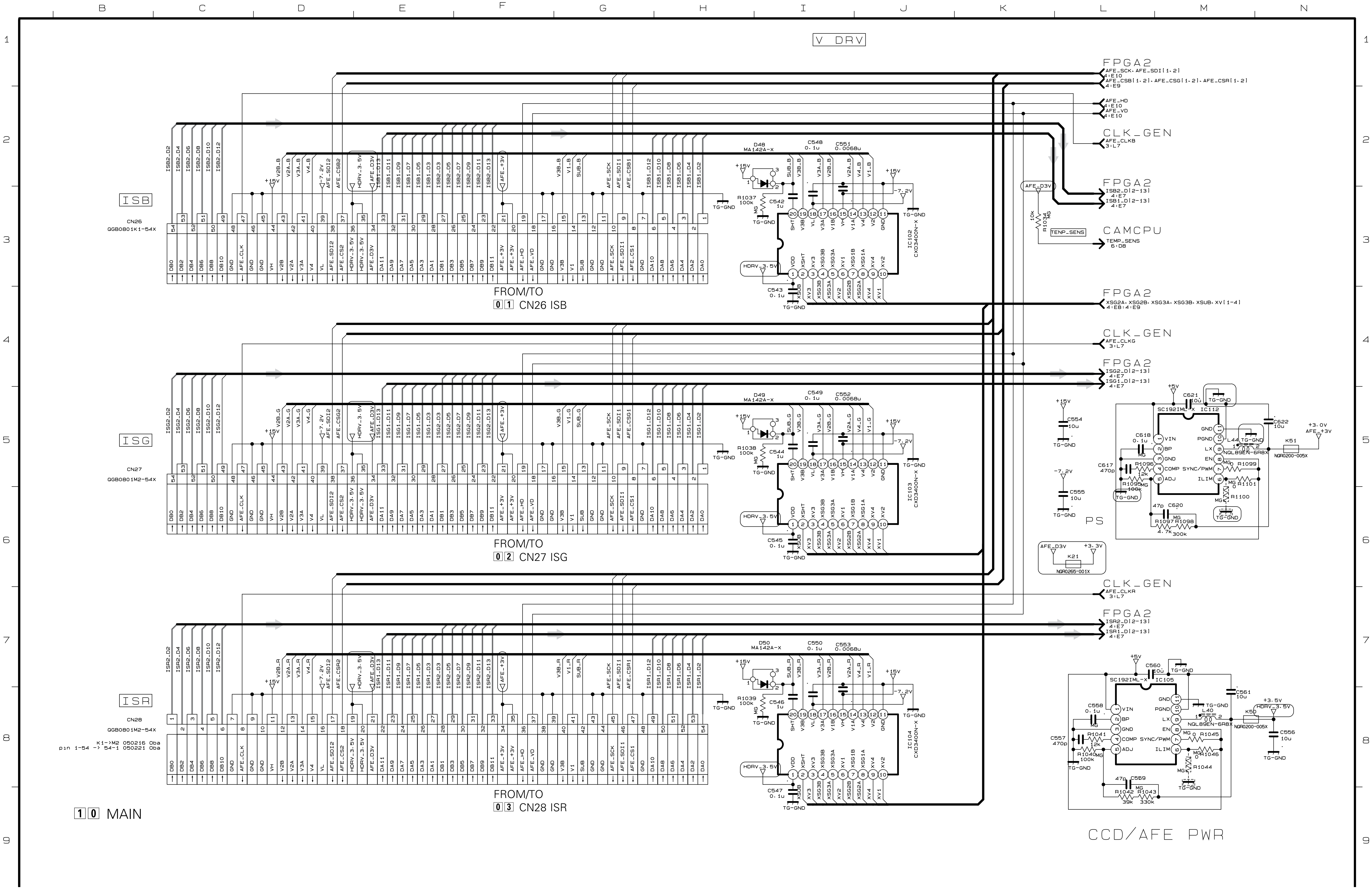
– MAIN SCHEMATIC DIAGRAMS (13/18) – (SENC)


IC90
SN74AHC1G08K-X
IC92
BU2285FV-X
IC91
NLC 0459APB (1/2)
SUPER ENC III
IC91
NLC 0459APB (2/2)
SUPER ENC III
DEC
MUX
&
De MUX
1394
LINK
HD PB
HD REC
HD 1394 IN/OUT
HD PB/EE
10 MAIN

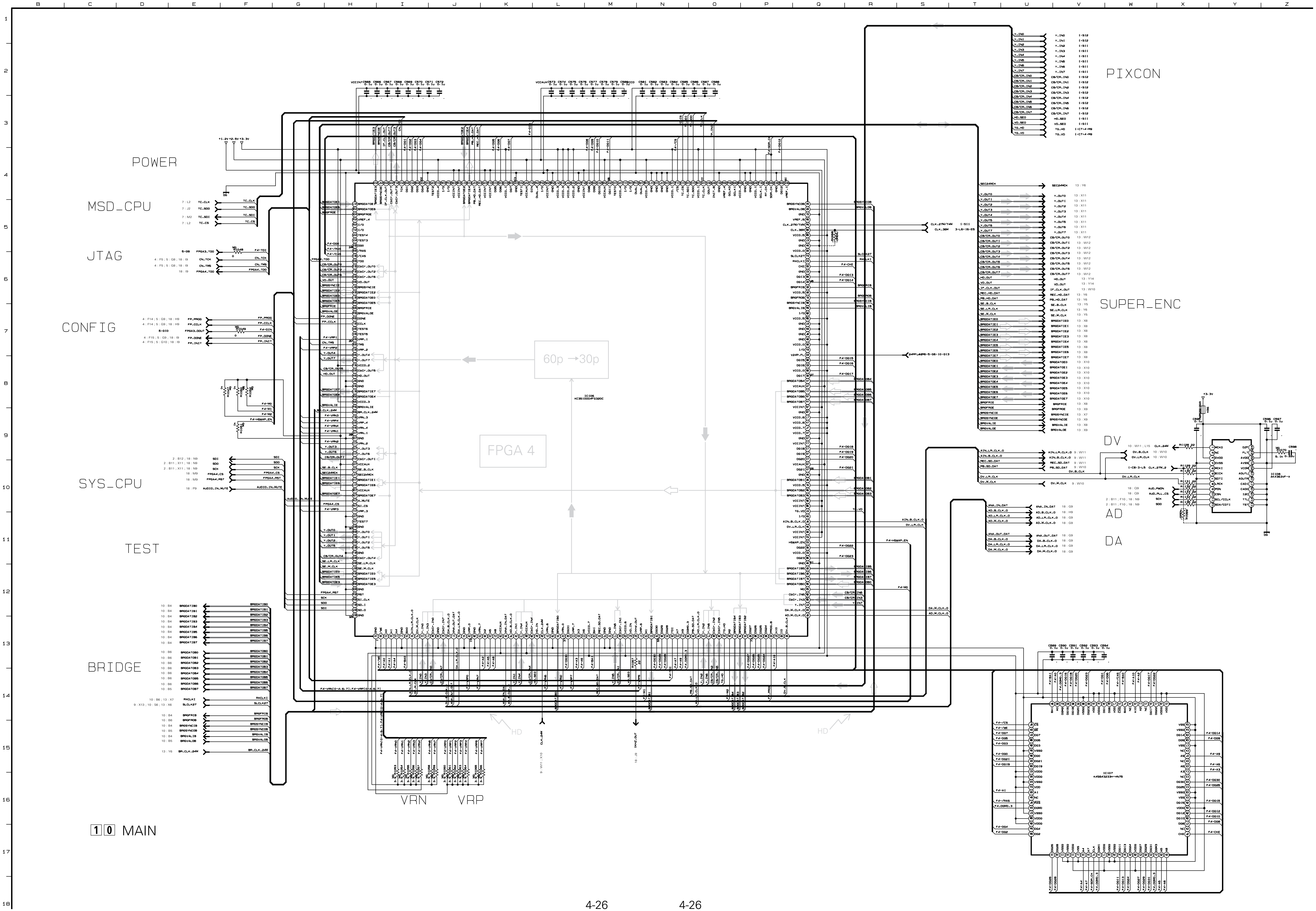
— MAIN SCHEMATIC DIAGRAMS (14/18) — (SENC RAM)


C
D
E
F
G
H
I
J
K
L
M
N
O
P
Q
R
2
3
4
5
6
7
8
9
10
11
IC94
SA16D70BFI02A01
IC93
EDS1232AABB-60T
IC95
EDS1232AABB-60T
R947
47k
R1121
47k
R945
R946
C476
1u
C490
1u
+3.3V
K49
FLASH_CE
FLASH_OE
FLASH_WE
DSC_RST
10 MAIN

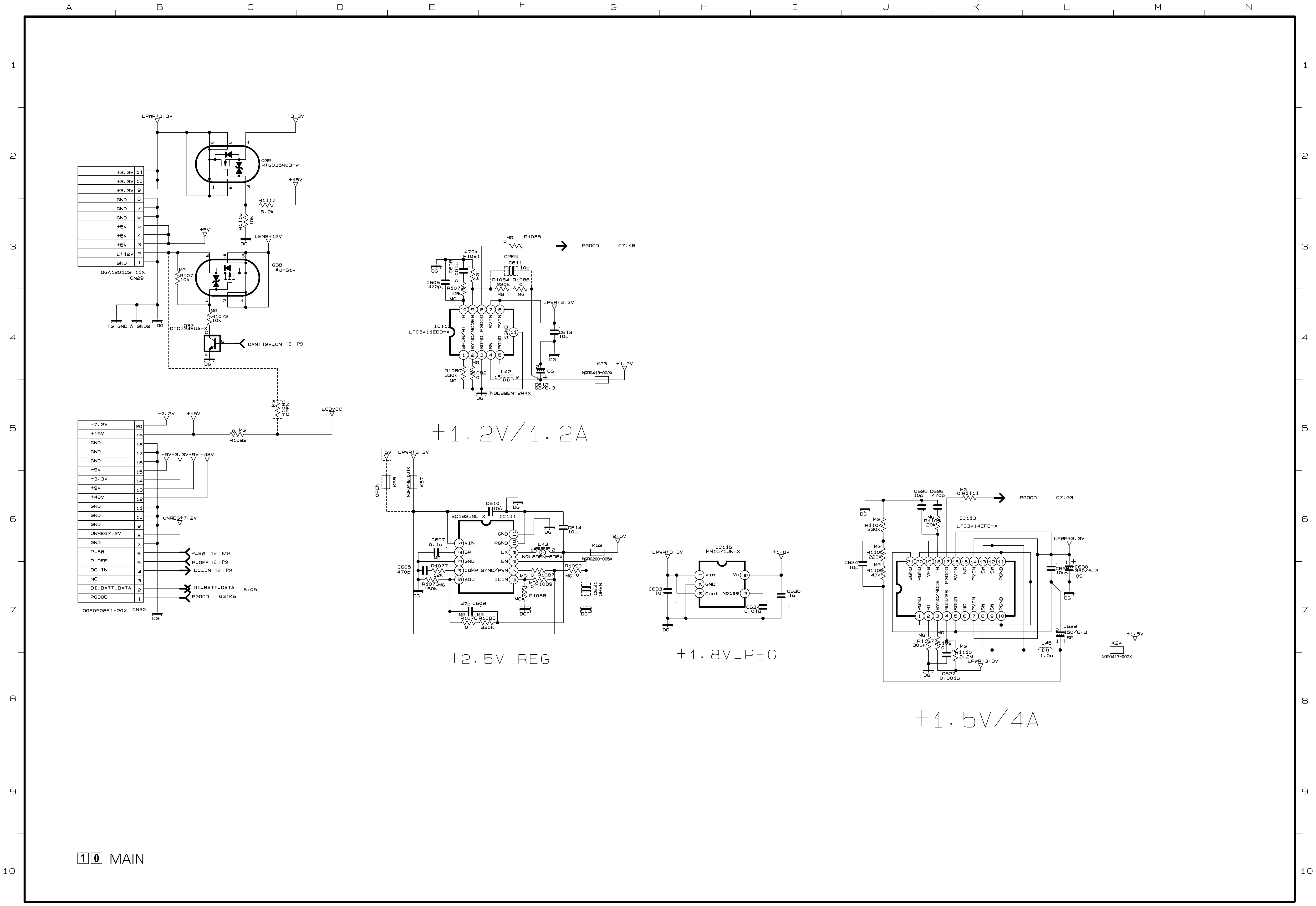
– MAIN SCHEMATIC DIAGRAMS (15/18) – (IS I/F)


V DRV
ISB
CN26
QGB0801K1-54X
FROM/TO
01 CN26 ISB
ISG
CN27
QGB0801M2-54X
FROM/TO
02 CN27 ISG
ISR
CN28
QGB0801M2-54X
K1->M2 050216 Oba
pin 1-54 -> 54-1 050221 Oba
FROM/TO
03 CN28 ISR
10 MAIN
D48 MA142A-X
D49 MA142A-X
D50 MA142A-X
IC102 CXD3400N-X
IC103 CXD3400N-X
IC104 CXD3400N-X
FPGA2
AFE_SCK, AFE_SDI[1:2]
AFE_CSB[1:2], AFE_CSG[1:2], AFE_CSR[1:2]
AFE_HD
AFE_VD
CLK_GEN
AFE_CLKB
ISB2_D[2-13]
ISB1_D[2-13]
CAMCPU
TEMP_SENS
XSG2A, XSG2B, XSG3A, XSG3B, XSUB, XV[1-4]
AFE_CLKG
ISG2_D[2-13]
ISG1_D[2-13]
AFE_CLKR
ISR2_D[2-13]
ISR1_D[2-13]
SC192IML-X IC112
SC192IML-X IC105
NQL89EN-6R8X
NQR0200-005X
NQR0265-001X
K21
K50
K51
AFE_D3V
+3.3V
+3.0V AFE_+3V
+3.5V HDRV_3.5V
PS
CCD/AFE PWR
TG-GND

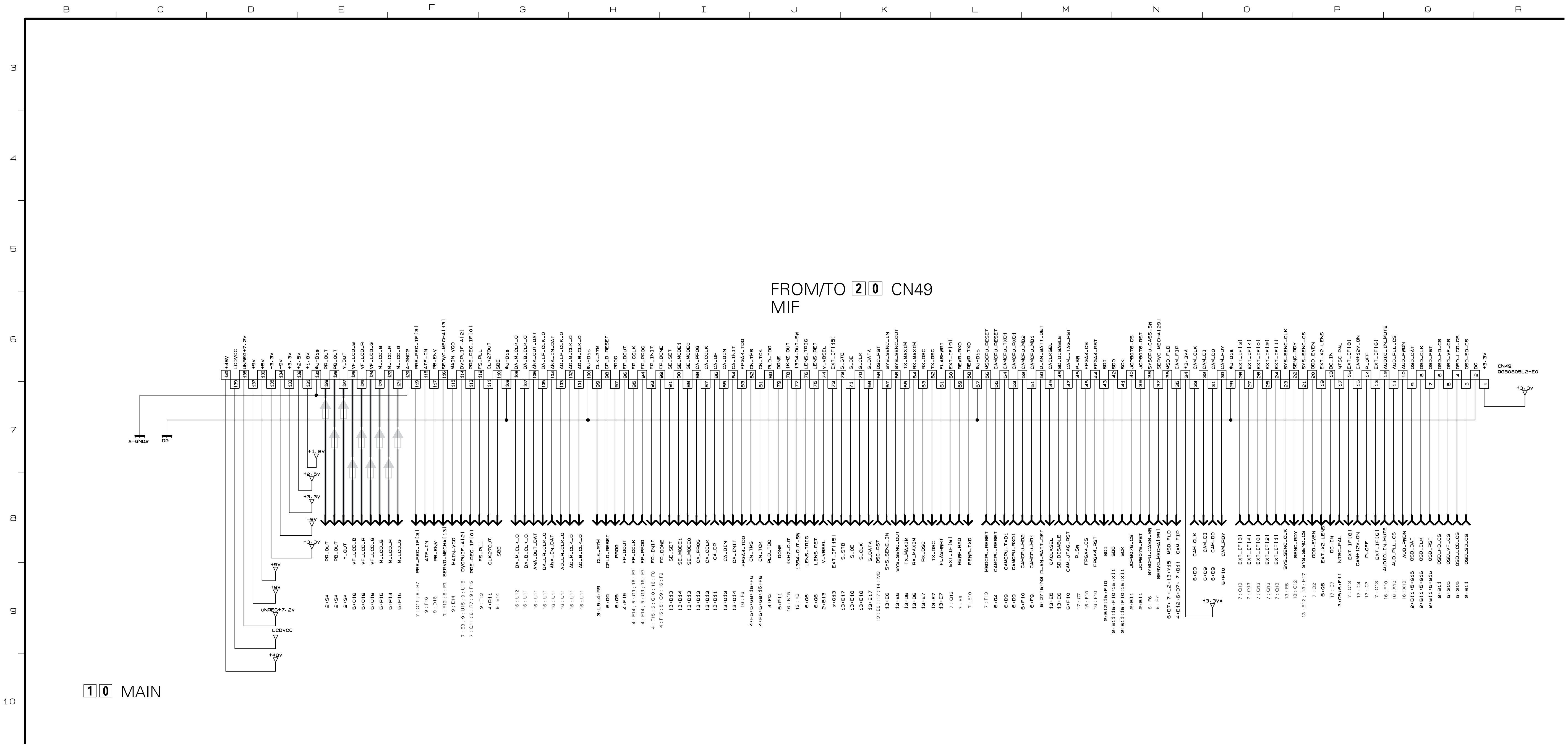
— MAIN SCHEMATIC DIAGRAMS (16/18) — (60/30 FPGA-4)


POWER
MSD_CPU
JTAG
CONFIG
SYS_CPU
TEST
BRIDGE
PIXCON
SUPER_ENC
DV
AD
DA
60p →30p
FPGA 4
IC106
XC3S10004FG320C
IC108
AK4363VF-X
IC107
K4S643233H-HN75
VRN
VRP
HD
1 0 MAIN

– MAIN SCHEMATIC DIAGRAMS (17/18) – (LOCAL_PWR)

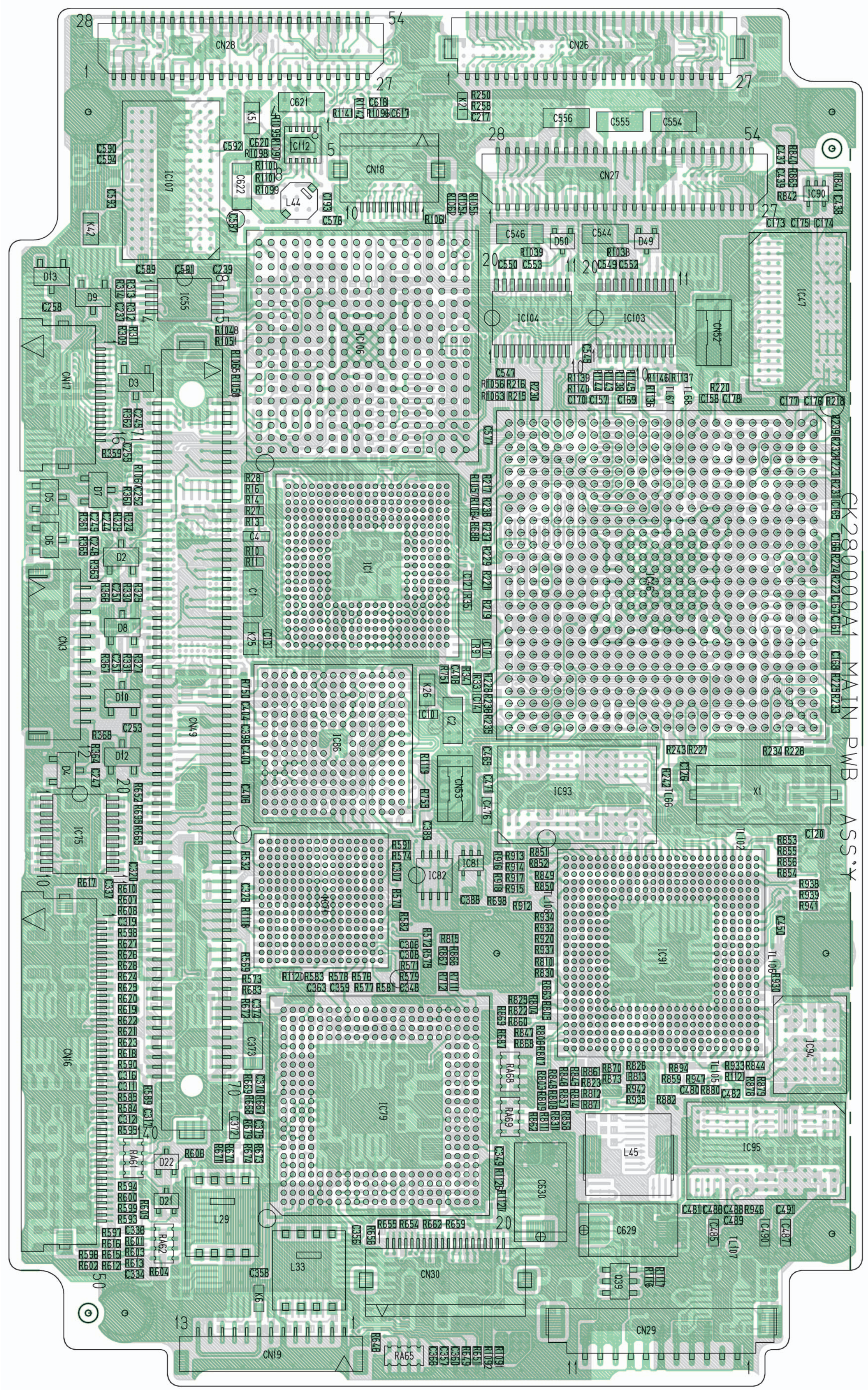

A
B
C
D
E
F
G
H
I
J
K
L
M
N
1
2
3
4
5
6
7
8
9
10
LPWR+3.3V
+3.3V
Q39
RTQ035N03-W
+15V
R1117
6.2k
R1116
10k
DG
+5V
LENS+12V
Q38
J-Sty
R1071
10k
R1072
10k
Q37
DTC124EUA-X
CAM+12V_ON 18 : P9
QGA1201C2-11X
CN29
TG-GND
A-GND2
+3.3V
GND
+5V
L+12V
R1085
PGOOD C7:K6
R1081
470k
C608
C606
470p
R1079
12k
C611
10p
OPEN
R1084
220k
R1086
0
LPWR+3.3V
IC110
LTC3411EDD-X
SHDN/RT
SYNC/MODE
SGND
PGOOD
SVIN
PVIN
SW
PGND
C613
10u
R1080
330k
R1082
0
L42
NQL89EN-2R4X
C612
68/6.3
OS
K23
NQR0413-002X
+1.2V
+1.2V/1.2A
-7.2V
+15V
LCDVCC
R1092
R1093
OPEN
-9V
-3.3V
+9V
+48V
-7.2V
-9V
-3.3V
+9V
+48V
UNREG7.2V
P_SW
P_OFF
DC_IN
NC
DI_BATT_DATA
PGOOD
P_SW 18 : M9
P_OFF 18 : P9
DC_IN 18 : P9
DI_BATT_DATA 6:Q5
PGOOD G3:K6
QGF0508F1-20X
CN30
K58
K57
OPEN
NQR0413-001X
C610
10u
SC1921ML-X
IC111
VIN
BP
GND
COMP
ADJ
PGND
LX
EN
SYNC/PWM
ILIM
C607
0.1u
C605
470p
R1077
12k
R1076
150k
C614
10u
L43
NQL89EN-6R8X
K52
NQR0200-005X
+2.5V
R1090
R1087
R1089
R1088
C631
OPEN
C609
47p
R1078
0
R1083
330k
+2.5V_REG
LPWR+3.3V
IC115
MM1571JN-X
+1.8V
Vin
GND
Cont
Vo
Noise
C633
1u
C634
0.01u
C635
1u
+1.8V_REG
C625
10p
C626
470p
R1111
PGOOD C7:G3
R1104
330k
R1108
20k
IC113
LTC3414EFE-X
R1105
220k
R1106
47k
C624
10p
SGND
VFB
ITH
RUN/SS
NC
C628
10u
C630
330/6.3
OS
LPWR+3.3V
C629
150/6.3
SP
R1107
330k
R1109
0
R1110
2.2M
C627
0.001u
L45
1.0u
K24
NQR0413-002X
+1.5V
+1.5V/4A
10 MAIN

— MAIN SCHEMATIC DIAGRAMS (18/18) — (MIF I/F)

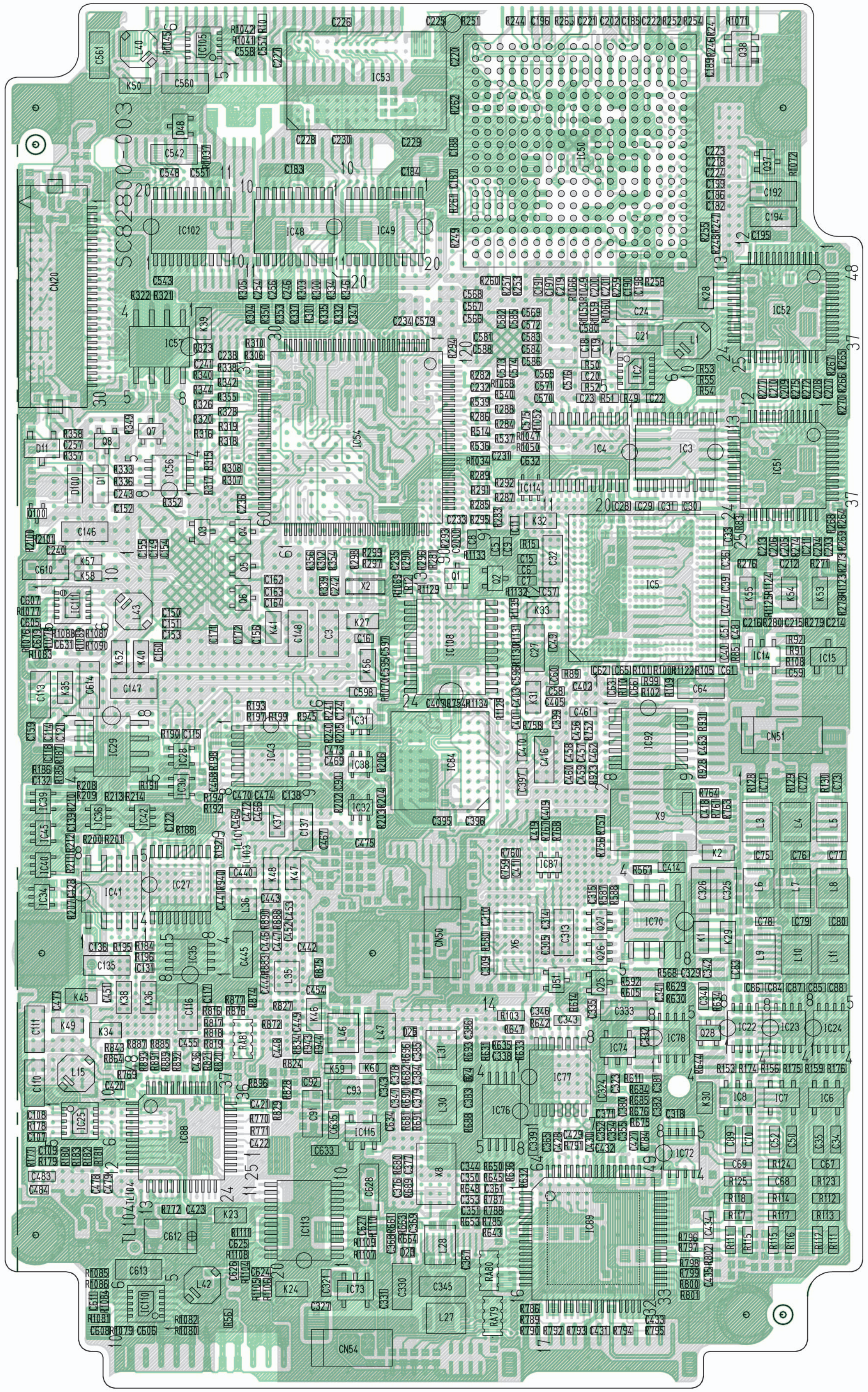

FROM/TO 20 CN49
MIF
CN49
QGB0805L2-E0
10 MAIN
A-GND2
DG
+1.8V
+2.5V
+3.3V
-5V
-3.3V
+5V
+9V
UNREG+7.2V
LCDVCC
+48V
+3.3V
+3.3VA

4.10 MAIN CIRCUIT BOARD

– SIDE A –

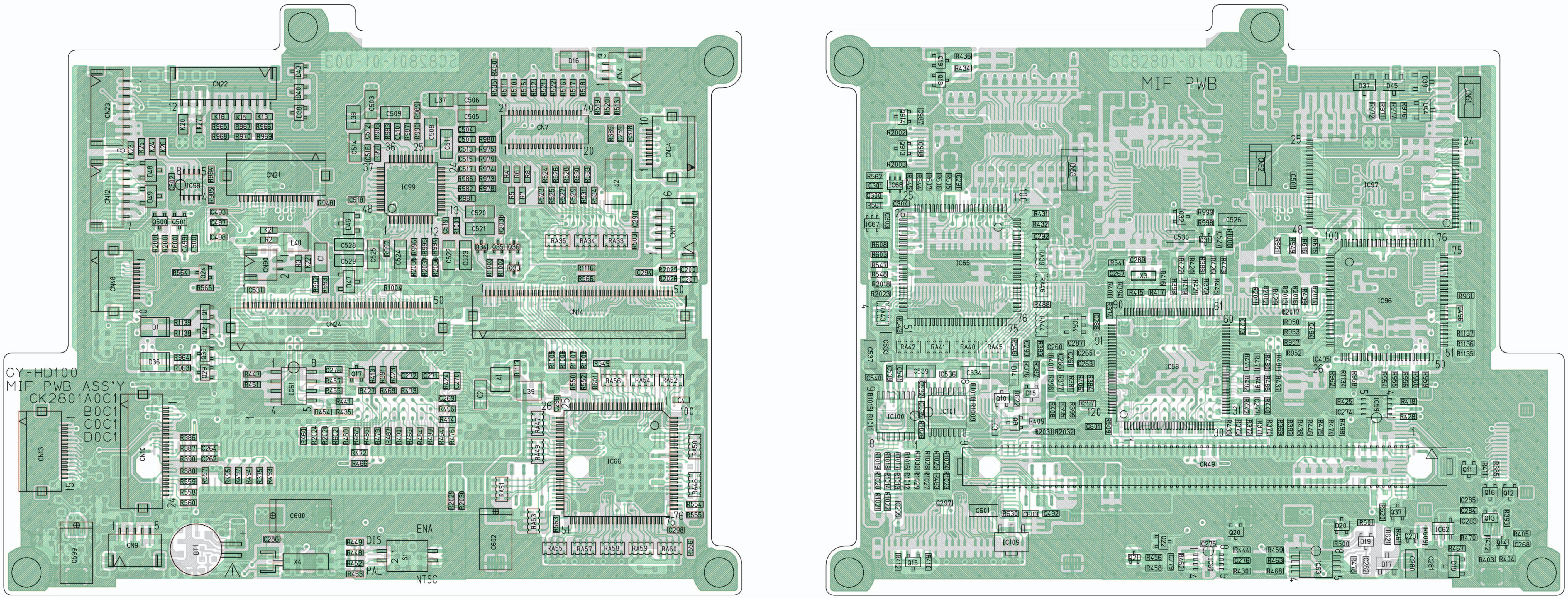

CK28000A1 MAIN PWB ASS'Y

– SIDE B –



4.11 MIF & PS CIRCUIT BOARDS

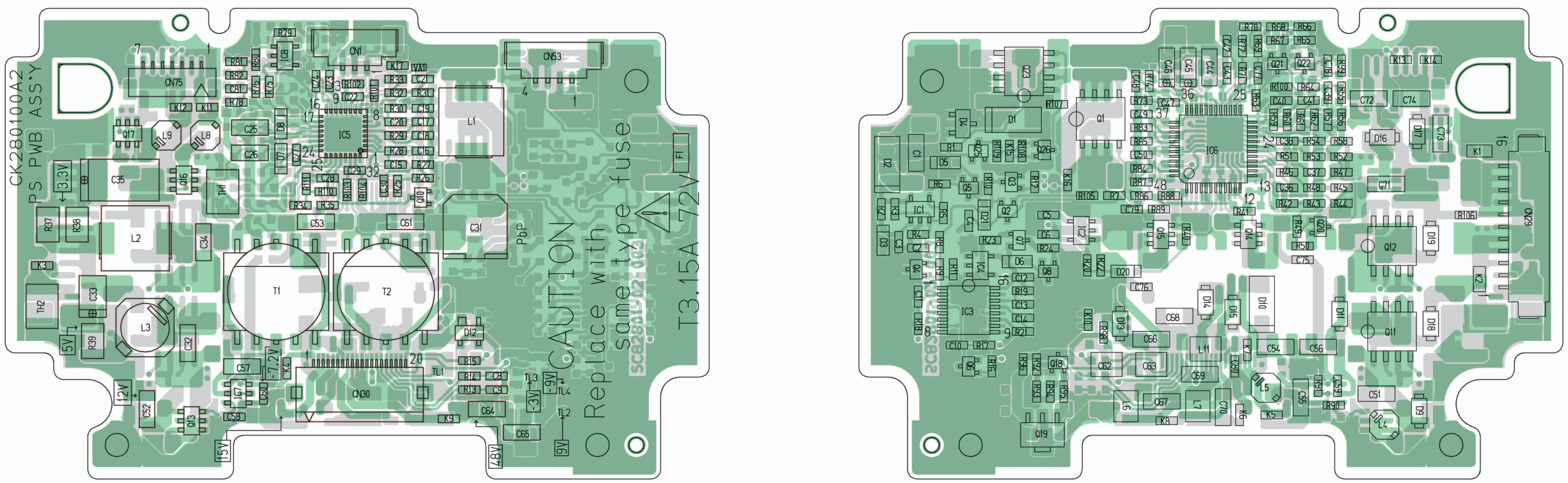
– MIF –


– SIDE A –

– SIDE B –

GY-HD100
MIF PWB ASS'Y
CK2801A0C1
B0C1
C0C1
D0C1
SC82801-01-003
MIF PWB
IC99
IC66
IC65
IC58
IC96
IC97
CN24
CN49
DIS
ENA
PAL
NTSC

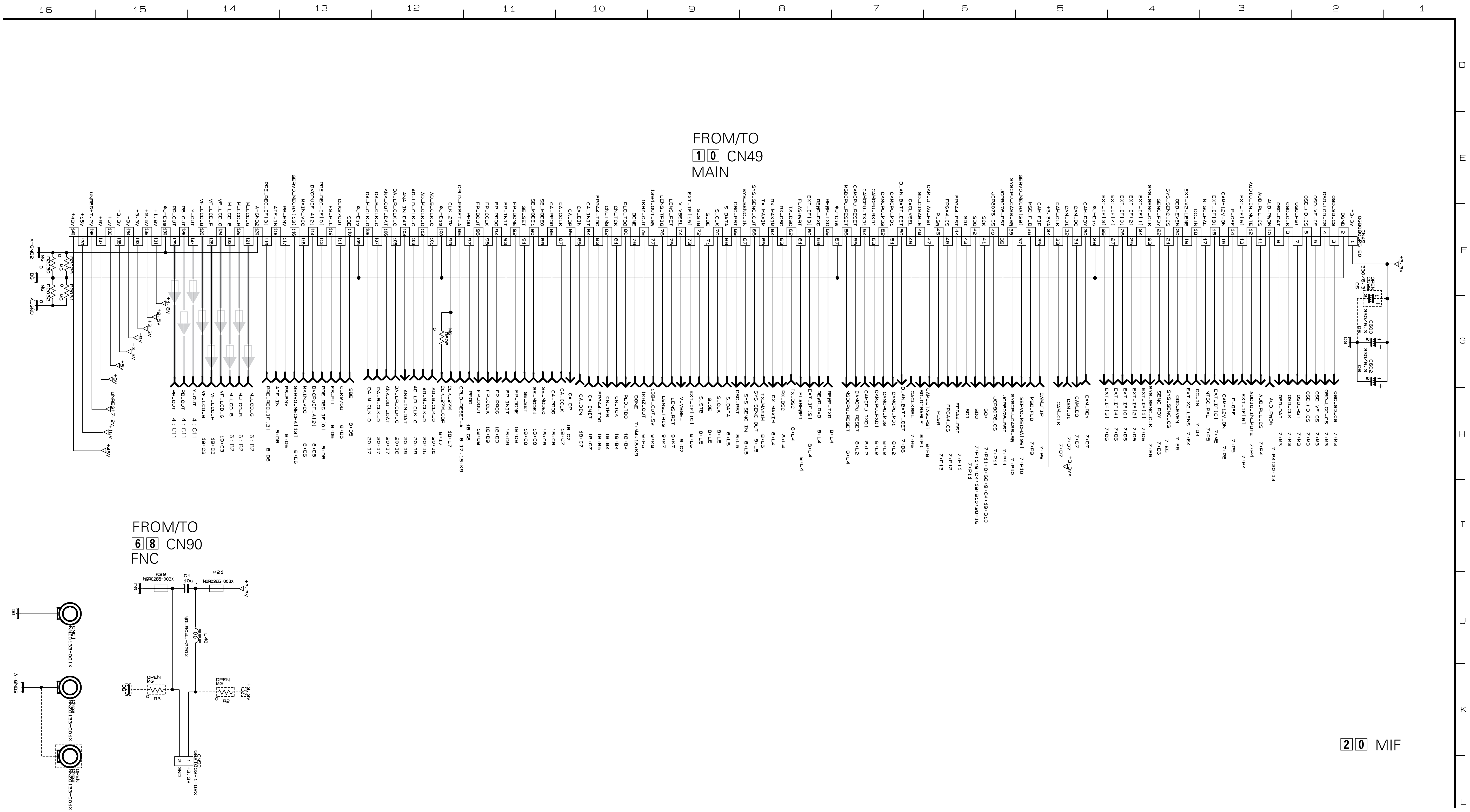
– PS –


– SIDE A –

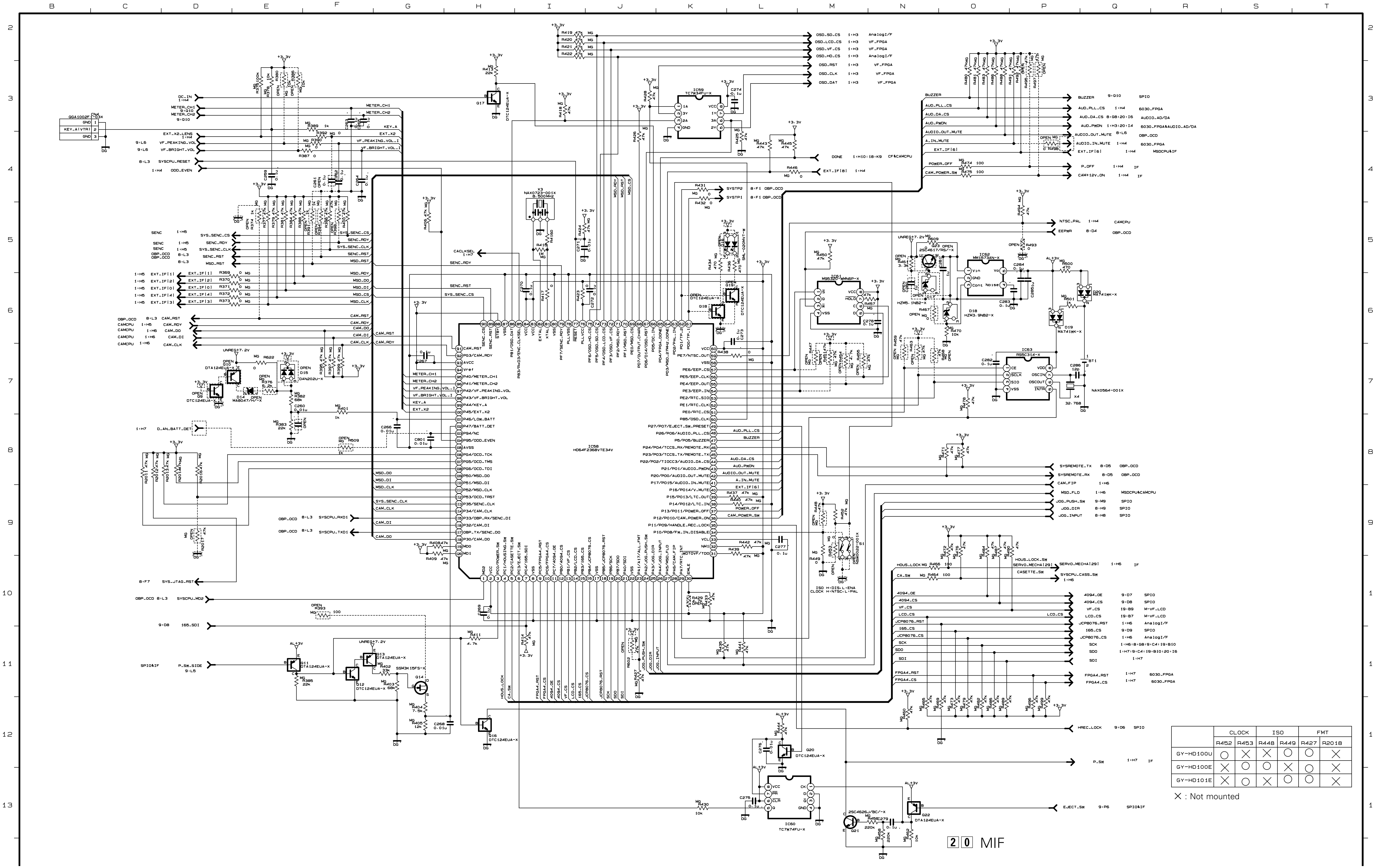
– SIDE B –

PS PWB ASS'Y
CK280100A2
CAUTION
Replace with
same type fuse
T3.15A 72V
T1
T2
IC5
IC3

4.12 MIF SCHEMATIC DIAGRAMS (1/7) (MIF-MAIN I/F)


16
15
14
13
12
11
10
9
8
7
6
5
4
3
2
1
D
E
F
G
H
I
J
K
L
FROM/TO
10 CN49
MAIN
FROM/TO
68 CN90
FNC
20 MIF

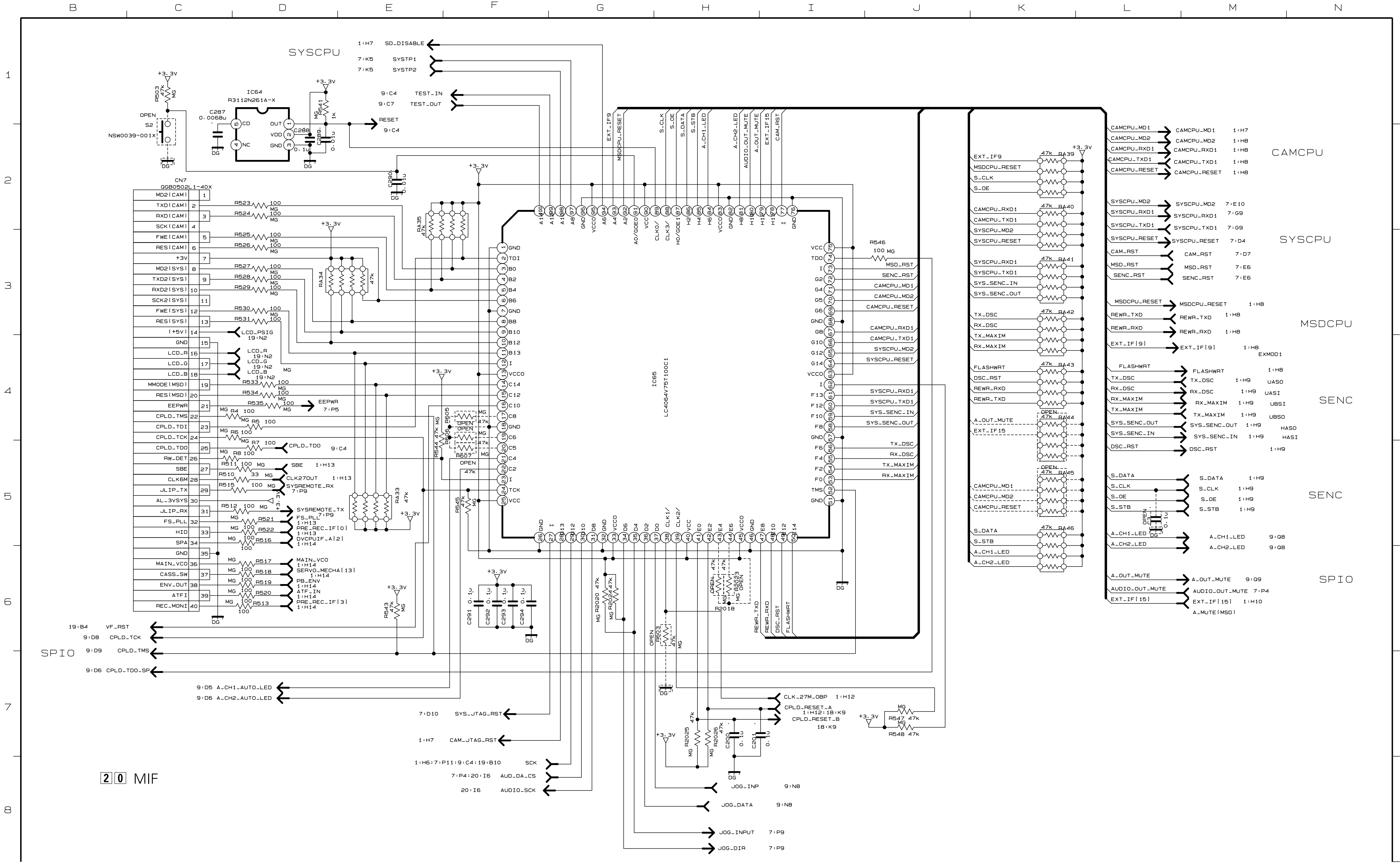
– MIF SCHEMATIC DIAGRAMS (2/7) – (SYS CPU)


IC58
HD64F2368VTE34Y
IC59
TC7W34FU-X
IC60
TC7W74FU-X
IC61
M95320-WMN6P-X
IC62
MM1573AN-X
IC63
RS5C314-X
X3
NAX0723-001X
9.800MHz
X4
NAX0564-001X
32.768
QGA1002F-03X
KEY_A(VTR)
BUZZER
AUD_PLL_CS
AUD_DA_CS
AUD_PWON
AUDIO_OUT_MUTE
A_IN_MUTE
EXT_IF[6]
P_OFF
CAM+12V_ON
NTSC_PAL
EEPWR
SYSREMOTE_TX
SYSREMOTE_RX
CAM_FIP
MSD_FLD
JOG_PUSH_SW
JOG_DIR
JOG_INPUT
SERVO_MECHA[29]
SYSCPU_CASS_SW
4094_OE
4094_CS
VF_CS
LCD_CS
JCP8076_RST
165_CS
JCP8076_CS
SCK
SDO
SDI
FPGA4_RST
FPGA4_CS
HREC_LOCK
P_SW
EJECT_SW
ISO H:DIS L:ENA
CLOCK H:NTSC L:PAL
B C D E F G H I J K L M N O P Q R S T
2 3 4 5 6 7 8 9 10 11 12 13
20 MIF

	CLOCK		ISO		FMT	
	R452	R453	R448	R449	R427	R2018
GY-HD100U	○	✕	✕	○	○	✕
GY-HD100E	✕	○	○	✕	○	✕
GY-HD101E	✕	○	✕	○	○	✕

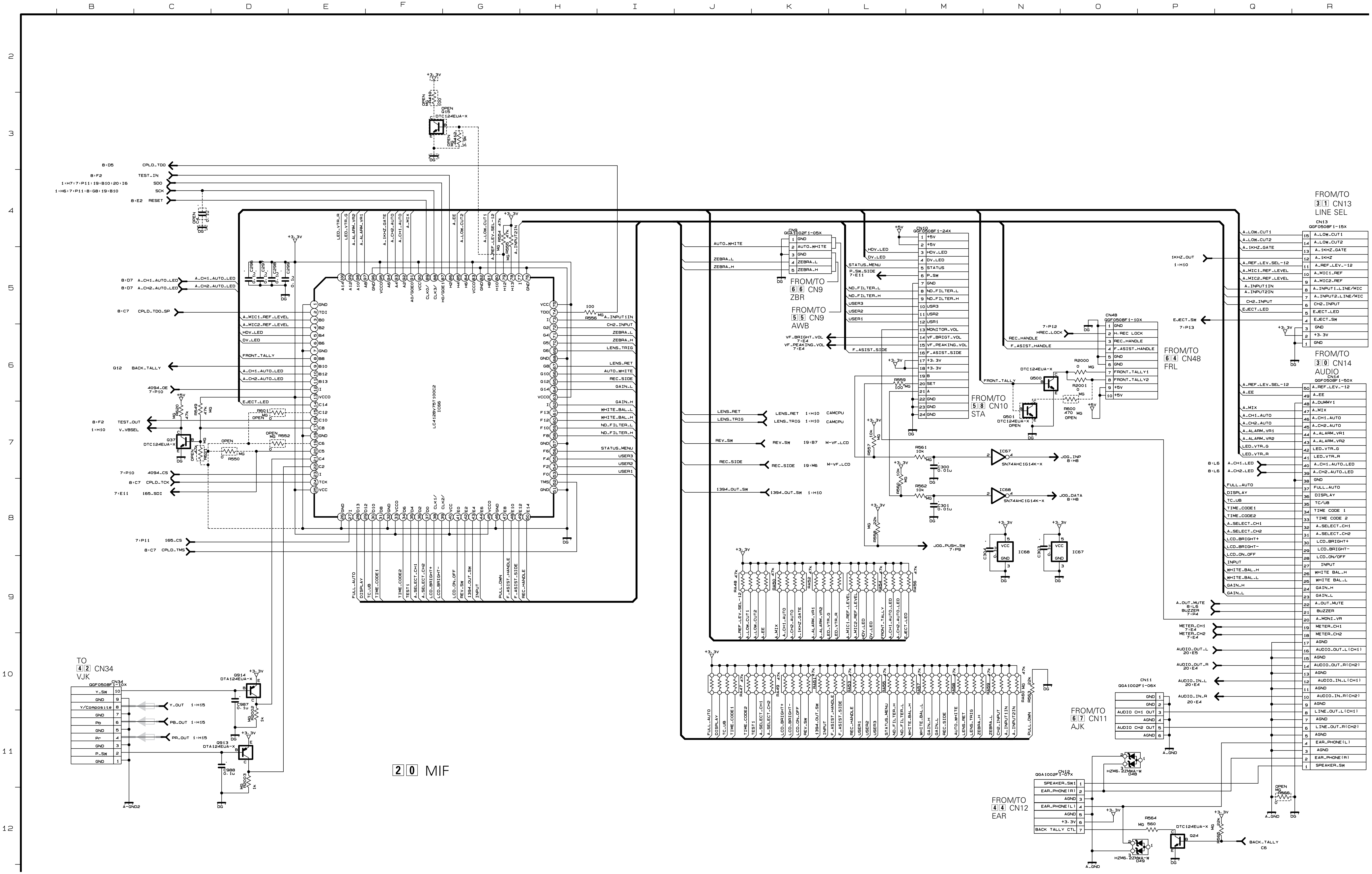
✕ : Not mounted

– MIF SCHEMATIC DIAGRAMS (3/7) – (OBP)



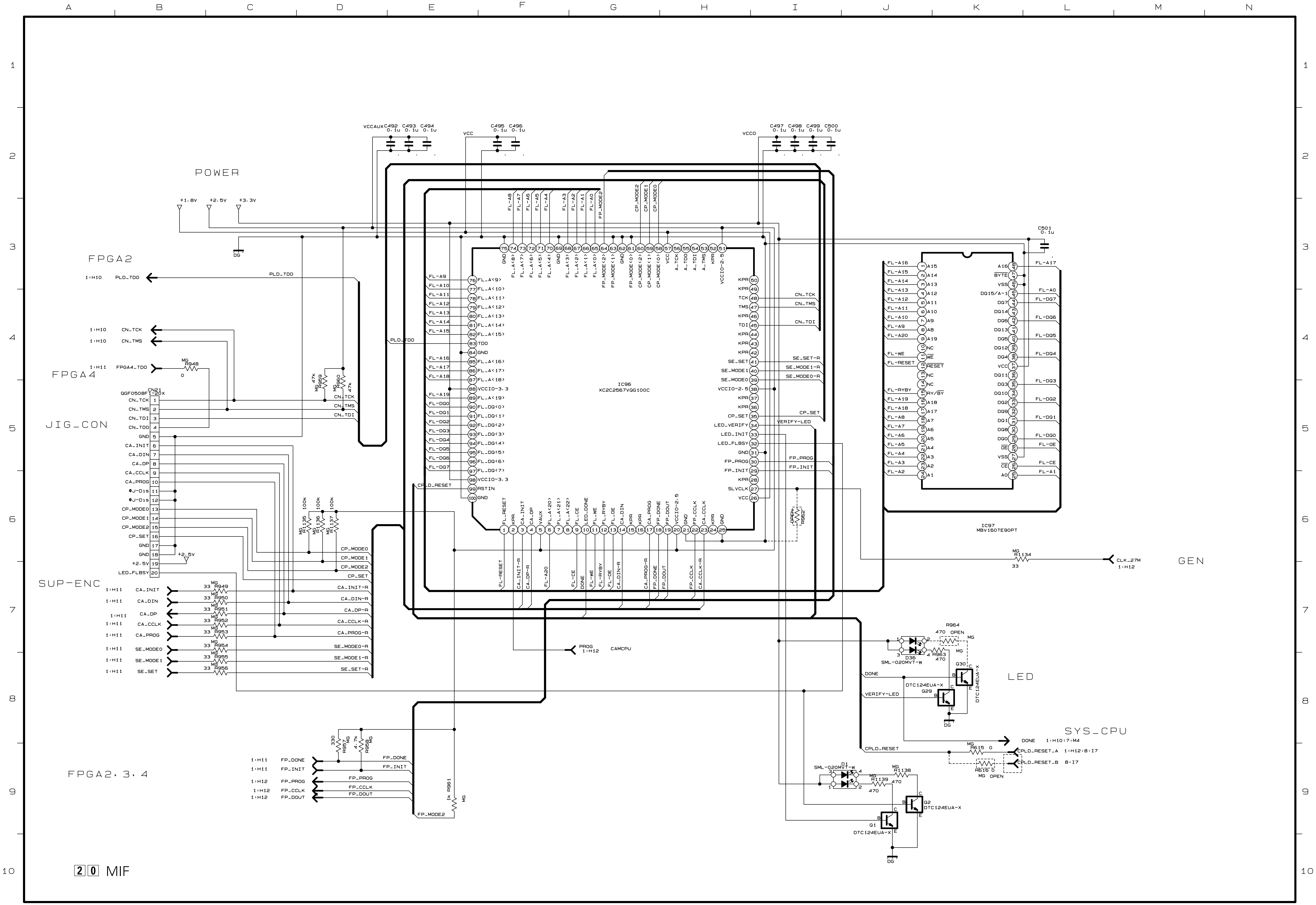
SYSCPU
IC64
R3112N261A-X
C287 0.0068u
S2
NSW0039-001X
OPEN
R503 47k MG
C288 0.1u
C289 0.01u
R541 1k MG
RESET 9:C4
1:H7 SD_DISABLE
7:K5 SYSTP1
7:K5 SYSTP2
9:C4 TEST_IN
9:C7 TEST_OUT
C290 0.01u
CN7
QGB0502L1-40X
MD2(CAM)
TXD(CAM)
RXD(CAM)
SCK(CAM)
FWE(CAM)
RES(CAM)
+3V
MD2(SYS)
TXD2(SYS)
RXD2(SYS)
SCK2(SYS)
FWE(SYS)
RES(SYS)
(+5V)
GND
LCD_R
LCD_G
LCD_B
MMODE(MSD)
RES(MSD)
EEPWR
CPLD_TMS
CPLD_TDI
CPLD_TCK
CPLD_TDO
RW_DET
SBE
CLK6M
JLIP_TX
AL_3VSYS
JLIP_RX
FS_PLL
HID
SPA
GND
MAIN_VCO
CASS_SW
ENV_OUT
ATFI
REC_MONI
LCD_PSIG 19:N2
LCD_R 19:N2
LCD_G 19:N2
LCD_B 19:N2
EEPWR 7:P5
CPLD_TDO 9:C4
SBE 1:H13
CLK27OUT 1:H13
SYSREMOTE_RX 7:P9
SYSREMOTE_TX 7:P9
FS_PLL 1:H13
PRE_REC_IF[0] 1:H13
DVCPUIF_A[2] 1:H14
MAIN_VCO 1:H14
SERVO_MECHA[13] 1:H14
PB_ENV 1:H14
ATF_IN 1:H14
PRE_REC_IF[3] 1:H14
RA34 47k
RA35 47k
RA33 47k
R545 47k MG
R546 100 MG
R543 47k MG
R544 47k MG
R505
R507
IC65
LC4064V75T100C1
19:B4 VF_RST
9:D8 CPLD_TCK
9:D9 CPLD_TMS
9:D6 CPLD_TDO_SP
SPIO
9:D5 A_CH1_AUTO_LED
9:D6 A_CH2_AUTO_LED
7:D10 SYS_JTAG_RST
1:H7 CAM_JTAG_RST
1:H6:7:P11:9:C4:19:B10 SCK
7:P4:20:I6 AUD_DA_CS
20:I6 AUDIO_SCK
C291 0.1u
C292 0.1u
C293 0.1u
C294 0.1u
R2020 47k
R2024 47k
R2018
R2023
R2025 47k
R2026 47k
C200 0.1u
C201 0.1u
R547 47k
R548 47k
CLK_27M_OBP 1:H12
CPLD_RESET_A 1:H12:18:K9
CPLD_RESET_B 18:K9
JOG_INP 9:N8
JOG_DATA 9:N8
JOG_INPUT 7:P9
JOG_DIR 7:P9
EXT_IF9
MSDCPU_RESET
S_CLK
S_OE
S_DATA
S_STB
A_CH1_LED
A_CH2_LED
AUDIO_OUT_MUTE
A_OUT_MUTE
EXT_IF15
CAM_RST
REWR_TXD
REWR_RXD
DSC_RST
FLASHWRT
MSD_RST
SENC_RST
CAMCPU_MD1
CAMCPU_MD2
CAMCPU_RESET
CAMCPU_RXD1
CAMCPU_TXD1
SYSCPU_MD2
SYSCPU_RESET
SYSCPU_RXD1
SYSCPU_TXD1
SYS_SENC_IN
SYS_SENC_OUT
TX_DSC
RX_DSC
TX_MAXIM
RX_MAXIM
RA39 47k
RA40 47k
RA41 47k
RA42 47k
RA43 47k
RA44 47k
RA45 47k
RA46 47k
CAMCPU
CAMCPU_MD1 1:H7
CAMCPU_MD2 1:H8
CAMCPU_RXD1 1:H8
CAMCPU_TXD1 1:H8
CAMCPU_RESET 1:H8
SYSCPU_MD2 7:E10
SYSCPU_RXD1 7:G9
SYSCPU_TXD1 7:G9
SYSCPU_RESET 7:D4
CAM_RST 7:D7
MSD_RST 7:E6
SENC_RST 7:E6
MSDCPU
MSDCPU_RESET 1:H8
REWR_TXD 1:H8
REWR_RXD 1:H8
EXT_IF[9] 1:H8
EXMOD1
SENC
FLASHWRT 1:H8
TX_DSC 1:H9 UASO
RX_DSC 1:H9 UASI
RX_MAXIM 1:H9 UBSI
TX_MAXIM 1:H9 UBSO
SYS_SENC_OUT 1:H9 HASO
SYS_SENC_IN 1:H9 HASI
DSC_RST 1:H9
S_DATA 1:H9
S_CLK 1:H9
S_OE 1:H9
S_STB 1:H9
A_CH1_LED 9:Q8
A_CH2_LED 9:Q8
A_OUT_MUTE 9:Q9
AUDIO_OUT_MUTE 7:P4
EXT_IF[15] 1:H10
A_MUTE(MSD)
+3.3V
DG
MG
OPEN
20 MIF

— MIF SCHEMATIC DIAGRAMS (4/7) — (SPIO)



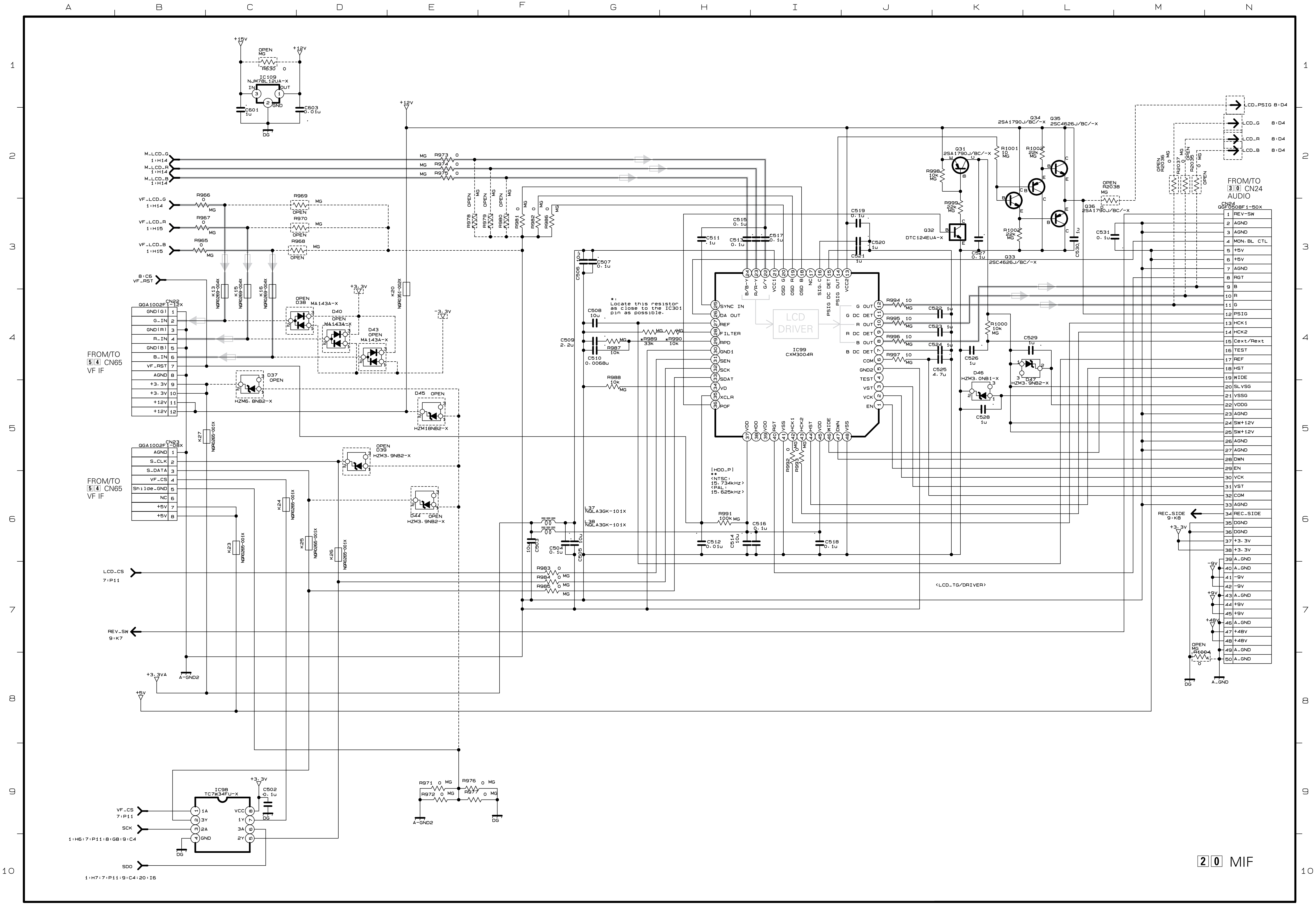
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P
Q
R
2
3
4
5
6
7
8
9
10
11
12
LC4128V75T100C2
IC66
DTC124EUA-X
Q15
Q37
Q500
Q501
Q24
DTA124EUA-X
Q914
Q913
SN74AHC1G14K-X
IC67
IC68
HZM6.2ZMWA-W
D48
D49
FROM/TO
3 1 CN13
LINE SEL
QGF0508F1-15X
FROM/TO
3 0 CN14
AUDIO
QGF0508F1-50X
FROM/TO
6 6 CN9
ZBR
QGA1002F1-05X
FROM/TO
5 5 CN9
AWB
FROM/TO
5 8 CN10
STA
QGF0508F1-24X
FROM/TO
6 4 CN48
FRL
QGF0508F1-10X
FROM/TO
6 7 CN11
AJK
QGA1002F1-06X
FROM/TO
4 4 CN12
EAR
QGA1002F1-07X
TO
4 2 CN34
VJK
QGF0508F1-10X
2 0 MIF
CPLD_TDO
TEST_IN
SDO
SCK
RESET
A_CH1_AUTO_LED
A_CH2_AUTO_LED
CPLD_TDO_SP
BACK_TALLY
TEST_OUT
V_VBSEL
4094_CS
CPLD_TCK
165_SDI
165_CS
CPLD_TMS
Y_OUT 1:H15
PB_OUT 1:H15
PR_OUT 1:H15
LENS_RET
LENS_TRIG
REV_SW
REC_SIDE
1394_OUT_SW
JOG_INP
JOG_DATA
JOG_PUSH_SW
1KHZ_OUT
EJECT_SW
SPEAKER_SW
EAR_PHONE(R)
EAR_PHONE(L)
BACK TALLY CTL
AUDIO_OUT_L
AUDIO_OUT_R
AUDIO_IN_L
AUDIO_IN_R
METER_CH1
METER_CH2
A_OUT_MUTE
BUZZER
+3.3V
+5V
DG
A_GND

– MIF SCHEMATIC DIAGRAMS (5/7) – (CF)



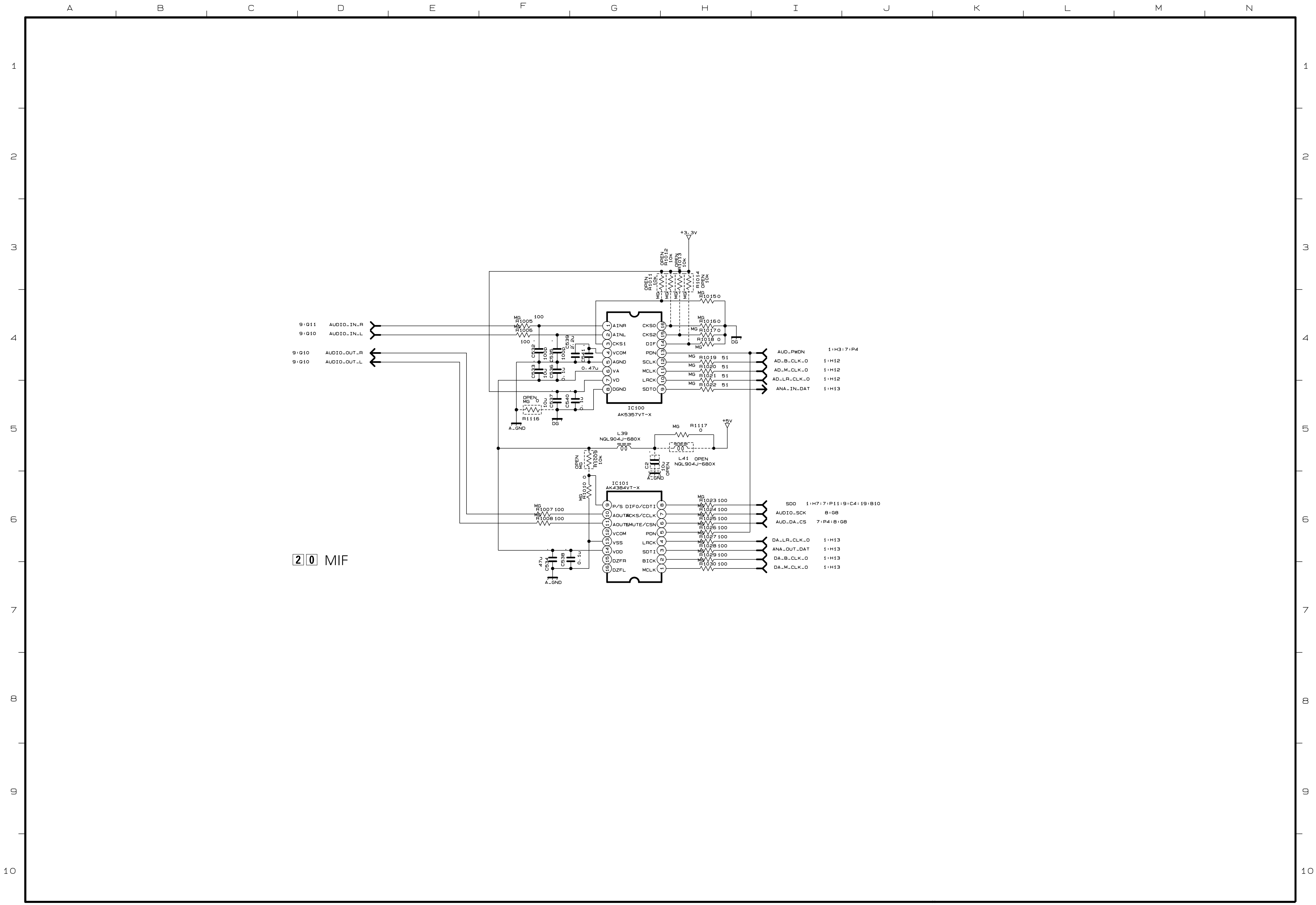
A
B
C
D
E
F
G
H
I
J
K
L
M
N
1
2
3
4
5
6
7
8
9
10
POWER
+1.8V
+2.5V
+3.3V
DG
VCCAUX
C492 0.1u
C493 0.1u
C494 0.1u
VCC
C495 0.1u
C496 0.1u
VCCO
C497 0.1u
C498 0.1u
C499 0.1u
C500 0.1u
C501 0.1u
FPGA2
1:H10 PLD_TDO
PLD_TDO
1:H10 CN_TCK
1:H10 CN_TMS
FPGA4
1:H11 FPGA4_TDO
MG R948 0
JIG_CON
CN21 GGF0508F1-20X
CN_TCK 1
CN_TMS 2
CN_TDI 3
CN_TDO 4
GND 5
CA_INIT 6
CA_DIN 7
CA_DP 8
CA_CCLK 9
CA_PROG 10
J-Dis 11
J-Dis 12
CP_MODE0 13
CP_MODE1 14
CP_MODE2 15
CP_SET 16
GND 17
GND 18
+2.5V 19
LED_FLBSY 20
+2.5V
MG R959 47k
MG R960 47k
CN_TCK
CN_TMS
CN_TDI
SUP-ENC
1:H11 CA_INIT
1:H11 CA_DIN
1:H11 CA_DP
1:H11 CA_CCLK
1:H11 CA_PROG
1:H11 SE_MODE0
1:H11 SE_MODE1
1:H11 SE_SET
33 MG R949
33 MG R950
33 MG R951
33 MG R952
33 MG R953
33 MG R954
33 MG R955
33 MG R956
MG R1135 100k
MG R1136 100k
MG R1137 100k
CP_MODE0
CP_MODE1
CP_MODE2
CP_SET
CA_INIT-R
CA_DIN-R
CA_DP-R
CA_CCLK-R
CA_PROG-R
SE_MODE0-R
SE_MODE1-R
SE_SET-R
CPLD_RESET
FL-A9
FL-A10
FL-A11
FL-A12
FL-A13
FL-A14
FL-A15
FL-A16
FL-A17
FL-A18
FL-A19
FL-DQ0
FL-DQ1
FL-DQ2
FL-DQ3
FL-DQ4
FL-DQ5
FL-DQ6
FL-DQ7
FL-A8
FL-A7
FL-A6
FL-A5
FL-A4
FL-A3
FL-A2
FL-A1
FL-A0
FP_MODE2
CP_MODE2
CP_MODE1
CP_MODE0
IC96 XC2C256-7VQG100C
76 FL_A(9)
77 FL_A(10)
78 FL_A(11)
79 FL_A(12)
80 FL_A(13)
81 FL_A(14)
82 FL_A(15)
83 TDO
84 GND
85 FL_A(16)
86 FL_A(17)
87 FL_A(18)
88 VCCIO-3.3
89 FL_A(19)
90 FL_DQ(0)
91 FL_DQ(1)
92 FL_DQ(2)
93 FL_DQ(3)
94 FL_DQ(4)
95 FL_DQ(5)
96 FL_DQ(6)
97 FL_DQ(7)
98 VCCIO-3.3
99 RSTIN
100 GND
KPR 50
KPR 49
TCK 48
TMS 47
KPR 46
TDI 45
KPR 44
KPR 43
KPR 42
SE_SET 41
SE_MODE1 40
SE_MODE0 39
VCCIO-2.5 38
KPR 37
KPR 36
CP_SET 35
LED_VERIFY 34
LED_INIT 33
LED_FLBSY 32
GND 31
FP_PROG 30
FP_INIT 29
KPR 28
SLVCLK 27
VCC 26
CN_TCK
CN_TMS
CN_TDI
SE_SET-R
SE_MODE1-R
SE_MODE0-R
CP_SET
VERIFY-LED
FP_PROG
FP_INIT
GREEN R962
FL-RESET
CA_INIT-R
CA_DP-R
FL-A20
FL-CE
DONE
FL-WE
FL-RYBY
FL-OE
CA_DIN-R
CA_PROG-R
FP_DONE
FP_DOUT
FP_CCLK
CA_CCLK-R
FL-A16
FL-A15
FL-A14
FL-A13
FL-A12
FL-A11
FL-A10
FL-A9
FL-A20
FL-WE
FL-RESET
FL-RYBY
FL-A19
FL-A18
FL-A8
FL-A7
FL-A6
FL-A5
FL-A4
FL-A3
FL-A2
FL-A17
FL-A0
FL-DQ7
FL-DQ6
FL-DQ5
FL-DQ4
FL-DQ3
FL-DQ2
FL-DQ1
FL-DQ0
FL-OE
FL-CE
FL-A1
A15
A14
A13
A12
A11
A10
A9
A8
A19
NC
WE
RESET
NC
NC
RY/BY
A18
A17
A7
A6
A5
A4
A3
A2
A1
A16
BYTE
VSS
DQ15/A-1
DQ7
DQ14
DQ6
DQ13
DQ5
DQ12
DQ4
VCC
DQ11
DQ3
DQ10
DQ2
DQ9
DQ1
DQ8
DQ0
OE
VSS
CE
A0
IC97 MBV160TE90PT
MG R1134 33
CLK_27M 1:H12
GEN
PROG 1:H12
CAMCPU
R964 470 OPEN MG
D36 SML-020MVT-W
R963 470 MG
Q30 DTC124EUA-X
Q29 DTC124EUA-X
DONE
VERIFY-LED
LED
DG
SYS_CPU
DONE 1:H10:7:M4
CPLD_RESET
MG R615 0
CPLD_RESET_A 1:H12:8:I7
CPLD_RESET_B 8:I7
R616 0 MG OPEN
D1 SML-020MVT-W
MG R1139 470
MG R1138 470
Q2 DTC124EUA-X
Q1 DTC124EUA-X
DG
330 R957 MG
4.7k R958 MG
FPGA2,3,4
1:H11 FP_DONE
1:H11 FP_INIT
1:H12 FP_PROG
1:H12 FP_CCLK
1:H12 FP_DOUT
FP_DONE
FP_INIT
FP_PROG
FP_CCLK
FP_DOUT
1k R961 MG
FP_MODE2
20 MIF

– MIF SCHEMATIC DIAGRAMS (6/7) – (M-VF LCD)

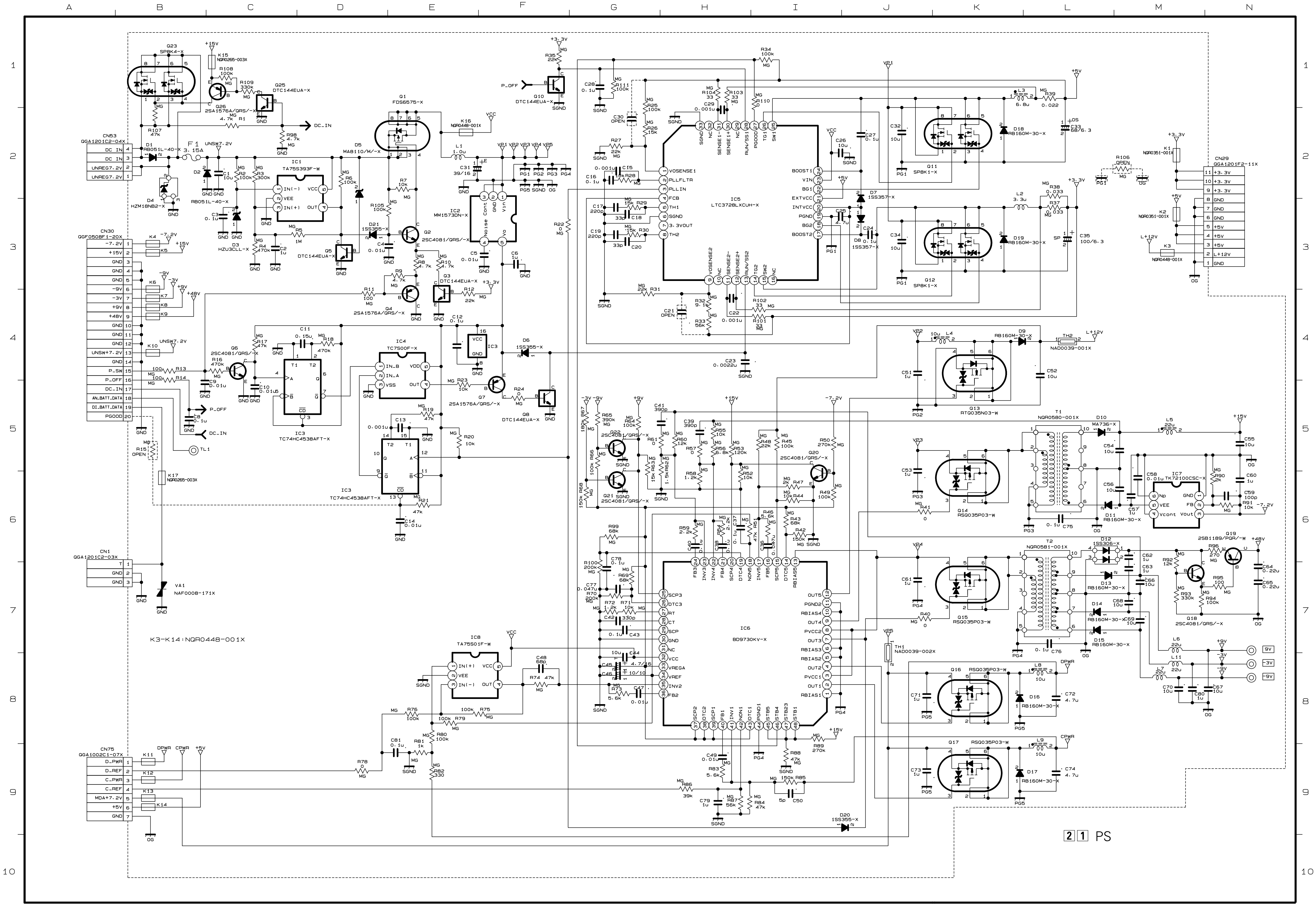


A
B
C
D
E
F
G
H
I
J
K
L
M
N
1
2
3
4
5
6
7
8
9
10
+15V
+12V
OPEN
MG
R630 0
IC109
NJM78L12UA-X
IN
OUT
GND
C601 1u
C603 0.01u
DG
M_LCD_G 1:H14
M_LCD_R 1:H14
M_LCD_B 1:H14
VF_LCD_G 1:H14
VF_LCD_R 1:H15
VF_LCD_B 1:H15
R966 0
R967 0
R965 0
R969
R970
R968
OPEN
8:C6 VF_RST
CN22
QGA1002F1-12X
GND(G)
G_IN
GND(R)
R_IN
GND(B)
B_IN
VF_RST
AGND
+3.3V
+3.3V
+12V
+12V
FROM/TO 5 4 CN65 VF IF
K13 NQR0269-004X
K15 NQR0269-004X
K16 NQR0269-004X
K20 NQR0351-002X
D38 MA143A-X
D40 MA143A-X
D43 MA143A-X
+3.3V
-3.3V
D37 OPEN
HZM6.8NB2-X
D45 OPEN
HZM18NB2-X
CN23
QGA1002F1-08X
AGND
S_CLK
S_DATA
VF_CS
Shilde_GND
NC
+5V
+5V
K27 NQR0266-001X
D39 OPEN
HZM3.9NB2-X
D44 OPEN
HZM3.9NB2-X
K24 NQR0266-001X
K23 NQR0266-001X
K25 NQR0266-001X
K26 NQR0266-001X
LCD_CS 7:P11
REV_SW 9:K7
+3.3VA
A-GND2
+5V
IC98
TC7W34FU-X
1A
3Y
2A
GND
VCC
1Y
3A
2Y
C502 0.1u
VF_CS 7:P11
SCK 1:H6:7:P11:8:G8:9:C4
SDO 1:H7:7:P11:9:C4:20:I6
R971 0
R972 0
R976 0
R977 0
A-GND2
DG
R973 0
R974 0
R975 0
R978
R979
R980
R981 0
R982 0
R986 0
C506 10u
C507 0.1u
C508 10u
C509 2.2u
C510 0.0068u
R987 10k
*R989 33k
*R990 10k
*: Locate this resistor as close to the IC301 pin as possible.
R988 10k
L37 NQLA3GK-101X
L38 NQLA3GK-101X
C503 10u
C504 0.1u
C505 10u
R983 0
R984 0
R985 0
C511 1u
C515 0.1u
C513 0.1u
C517 0.1u
C519 0.1u
C520 1u
C521 1u
IC99
CXM3004R
LCD DRIVER
B/B-Y
R/R-Y
G/Y
VCC1
OSD G
OSD R
OSD B
NC
SIG.C
PSIG DC DET
PSIG OUT
VCC2
SYNC IN
DA OUT
REF
FILTER
RPD
GND1
SEN
SCK
SDAT
VD
XCLR
POF
G OUT
G DC DET
R OUT
R DC DET
B OUT
B DC DET
COM
GND2
TEST
VST
VCK
EN
VDD
HDO
VDD
RGT
VSS
HCK1
HCK2
HST
VDD
WIDE
DWN
VSS
[HDO_P]
**
<NTSC>
15.734kHz
<PAL>
15.625kHz
R992
R993
R991 100k
C516 0.1u
C512 0.01u
C514 10u
C518 0.1u
R994 10
R995 10
R996 10
R997 10
C522 1u
C523 1u
C524 1u
C525 4.7u
C526 1u
R1000 10k
C529 1u
D46 HZM3.0NB1-X
D47 HZM3.9NB2-X
C528 1u
<LCD_TG/DRIVER>
Q31 2SA1790J/BC/-X
R998 10k
R999 22k
Q32 DTC124EUA-X
C527 0.1u
Q33 2SC4626J/BC/-X
Q34 2SA1790J/BC/-X
Q35 2SC4626J/BC/-X
Q36 2SA1790J/BC/-X
R1001 10
R1003 22k
R1002 22k
C530 1u
C531 0.1u
OPEN R2038
R2036
R2037
R2035
LCD_PSIG 8:D4
LCD_G 8:D4
LCD_R 8:D4
LCD_B 8:D4
FROM/TO 3 0 CN24 AUDIO
CN24
QGF0508F1-50X
REV-SW
AGND
AGND
MON.BL CTL
+5V
+5V
AGND
RGT
B
R
G
PSIG
HCK1
HCK2
Cext/Rext
TEST
REF
HST
WIDE
SLVSG
VSSG
VDDG
AGND
SW+12V
SW+12V
AGND
AGND
DWN
EN
VCK
VST
COM
AGND
REC_SIDE
DGND
DGND
+3.3V
+3.3V
A_GND
A_GND
-9V
-9V
A_GND
+9V
+9V
A_GND
+48V
+48V
A_GND
A_GND
REC_SIDE 9:K8
+3.3V
-9V
+9V
+48V
OPEN MG R1004 0
DG
A_GND
2 0 MIF

– MIF SCHEMATIC DIAGRAMS (7/7) – (AUDIO AD/DA)

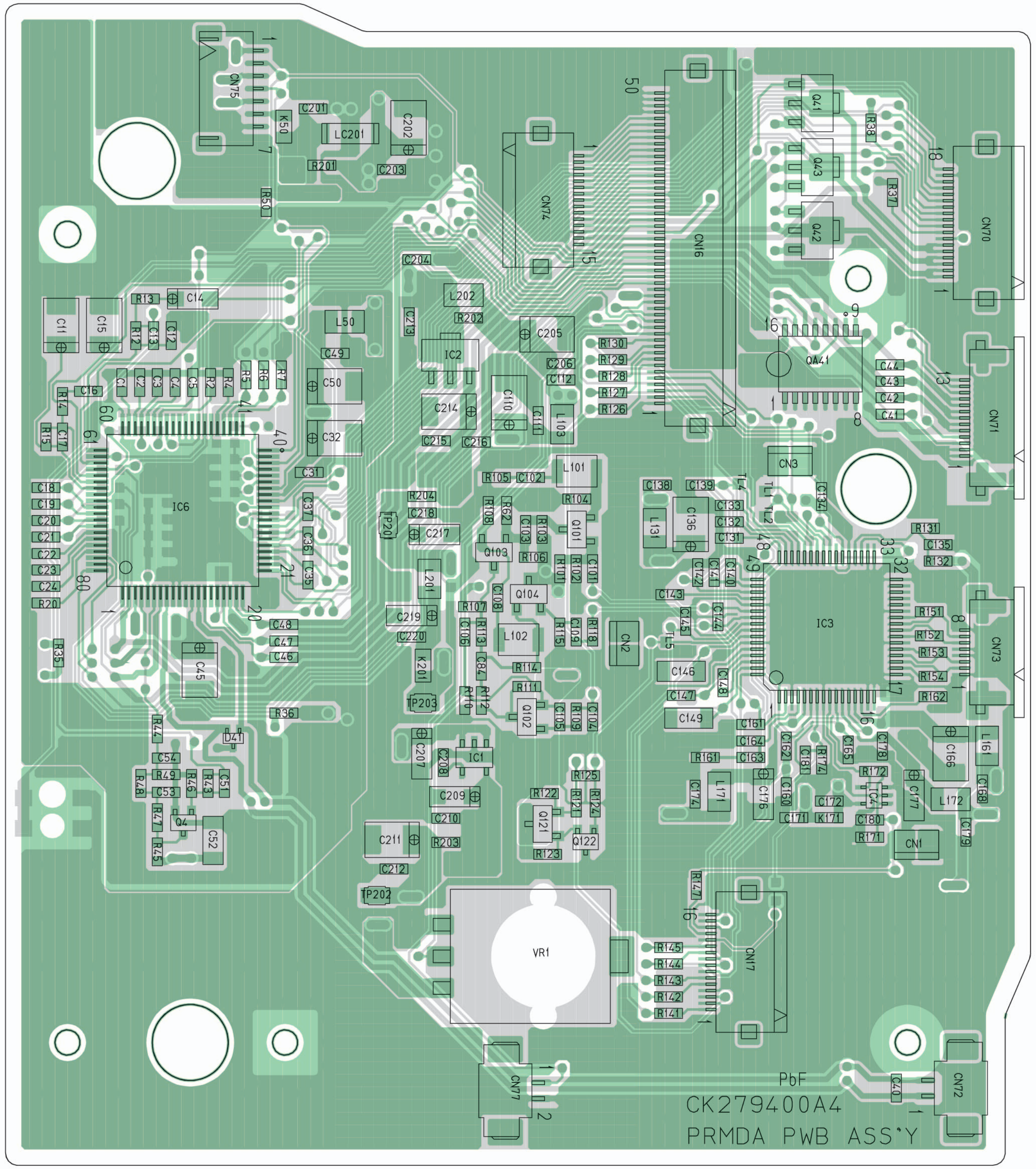

A B C D E F G H I J K L M N
1 2 3 4 5 6 7 8 9 10
9:Q11 AUDIO_IN_R
9:Q10 AUDIO_IN_L
9:Q10 AUDIO_OUT_R
9:Q10 AUDIO_OUT_L
MG R1005 100
MG R1006 100
C532 100p
C535 100p
C539 2.2u
C541 0.47u
C533 10u
C536 0.1u
C537 10u
C540 0.1u
OPEN MG 0 R1116
A_GND
DG
+3.3V
OPEN R1011 10k
OPEN R1012 10k
OPEN R1013 10k
R1014 OPEN 10k
MG R1015 0
MG R1016 0
MG R1017 0
MG R1018 0
1 AINR
2 AINL
3 CKS1
4 VCOM
5 AGND
6 VA
7 VD
8 DGND
16 CKS0
15 CKS2
14 DIF
13 PDN
12 SCLK
11 MCLK
10 LRCK
9 SDTO
IC100
AK5357VT-X
MG R1019 51
MG R1020 51
MG R1021 51
MG R1022 51
AUD_PWDN 1:H3:7:P4
AD_B_CLK_O 1:H12
AD_M_CLK_O 1:H12
AD_LR_CLK_O 1:H12
ANA_IN_DAT 1:H13
L39 NQL904J-680X
MG R1117 0
+5V
L41 OPEN NQL904J-680X
C2 10u OPEN
OPEN MG R1009 10k
MG R1010 0
IC101
AK4384VT-X
MG R1007 100
MG R1008 100
9 P/S
10 AOUTR
11 AOUTL
12 VCOM
13 VSS
14 VDD
15 DZFR
16 DZFL
8 DIF0/CDTI
7 ACKS/CCLK
6 SMUTE/CSN
5 PDN
4 LRCK
3 SDTI
2 BICK
1 MCLK
C534 47u
C538 0.1u
MG R1023 100
MG R1024 100
MG R1025 100
MG R1026 100
MG R1027 100
MG R1028 100
MG R1029 100
MG R1030 100
SDO 1:H7:7:P11:9:C4:19:B10
AUDIO_SCK 8:G8
AUD_DA_CS 7:P4:8:G8
DA_LR_CLK_O 1:H13
ANA_OUT_DAT 1:H13
DA_B_CLK_O 1:H13
DA_M_CLK_O 1:H13
2 0 MIF

4.13 PS SCHEMATIC DIAGRAM

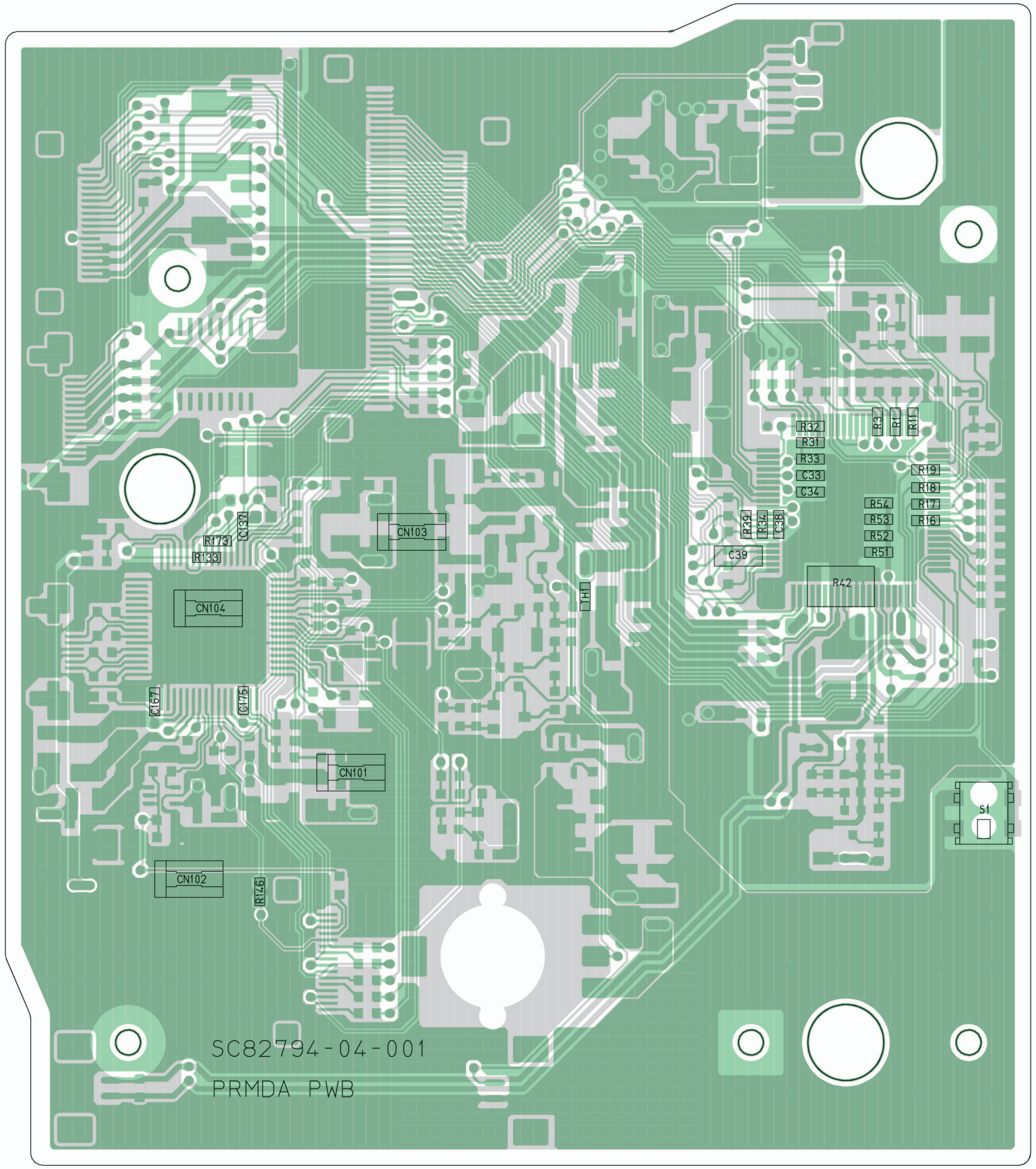

A
B
C
D
E
F
G
H
I
J
K
L
M
N
1
2
3
4
5
6
7
8
9
10
CN53 QGA1201C2-04X
DC_IN
UNREG7.2V
CN30 QGF0508F1-20X
-7.2V
+15V
GND
-9V
-3V
+9V
+48V
UNSW+7.2V
P_SW
P_OFF
DC_IN
AN_BATT_DATA
DI_BATT_DATA
PGOOD
CN1 QGA1201C2-03X
T
VA1 NAF0008-171X
K3-K14:NQR0448-001X
CN75 QGA1002C1-07X
D_PWR
D_REF
C_PWR
C_REF
MDA+7.2V
+5V
Q23 SPBK4-X
Q26 2SA1576A/QRS/-X
Q25 DTC144EUA-X
F1 3.15A
IC1 TA75S393F-W
Q1 FDS6575-X
D5 MA8110/M/-X
L1 1.0u
IC2 MM1573DN-X
Q10 DTC144EUA-X
P_OFF
Q2 2SC4081/QRS/-X
Q3 DTC144EUA-X
Q4 2SA1576A/QRS/-X
Q5 DTC144EUA-X
Q6 2SC4081/QRS/-X
IC3 TC74HC4538AFT-X
IC4 TC7S00F-X
Q7 2SA1576A/QRS/-X
Q8 DTC144EUA-X
D6 1SS355-X
IC5 LTC3728LXCUH-X
Q11 SPBK1-X
Q12 SPBK1-X
L3 6.8u
L2 3.3u
D18 RB160M-30-X
D19 RB160M-30-X
C33 68/6.3
C35 100/6.3
CN29 QGA1201F2-11X
+3.3V
+5V
L+12V
Q13 RTQ035N03-W
TH2 NAD0039-001X
D9 RB160M-30-X
T1 NQR0580-001X
D10 MA736-X
IC7 TK72100CSC-X
Q14 RSQ035P03-W
T2 NQR0581-001X
D12 1SS306-X
Q19 2SB1189/PQR/-W
Q18 2SC4081/QRS/-X
Q15 RSQ035P03-W
IC6 BD9730KV-X
Q20 2SC4081/QRS/-X
Q21 2SC4081/QRS/-X
Q22 2SC4081/QRS/-X
IC8 TA75S01F-W
TH1 NAD0039-002X
Q16 RSQ035P03-W
Q17 RSQ035P03-W
D16 RB160M-30-X
D17 RB160M-30-X
D20 1SS355-X
DPWR
CPWR
9V
-3V
-9V
2 1 PS

4.14 PRMDA CIRCUIT BOARD

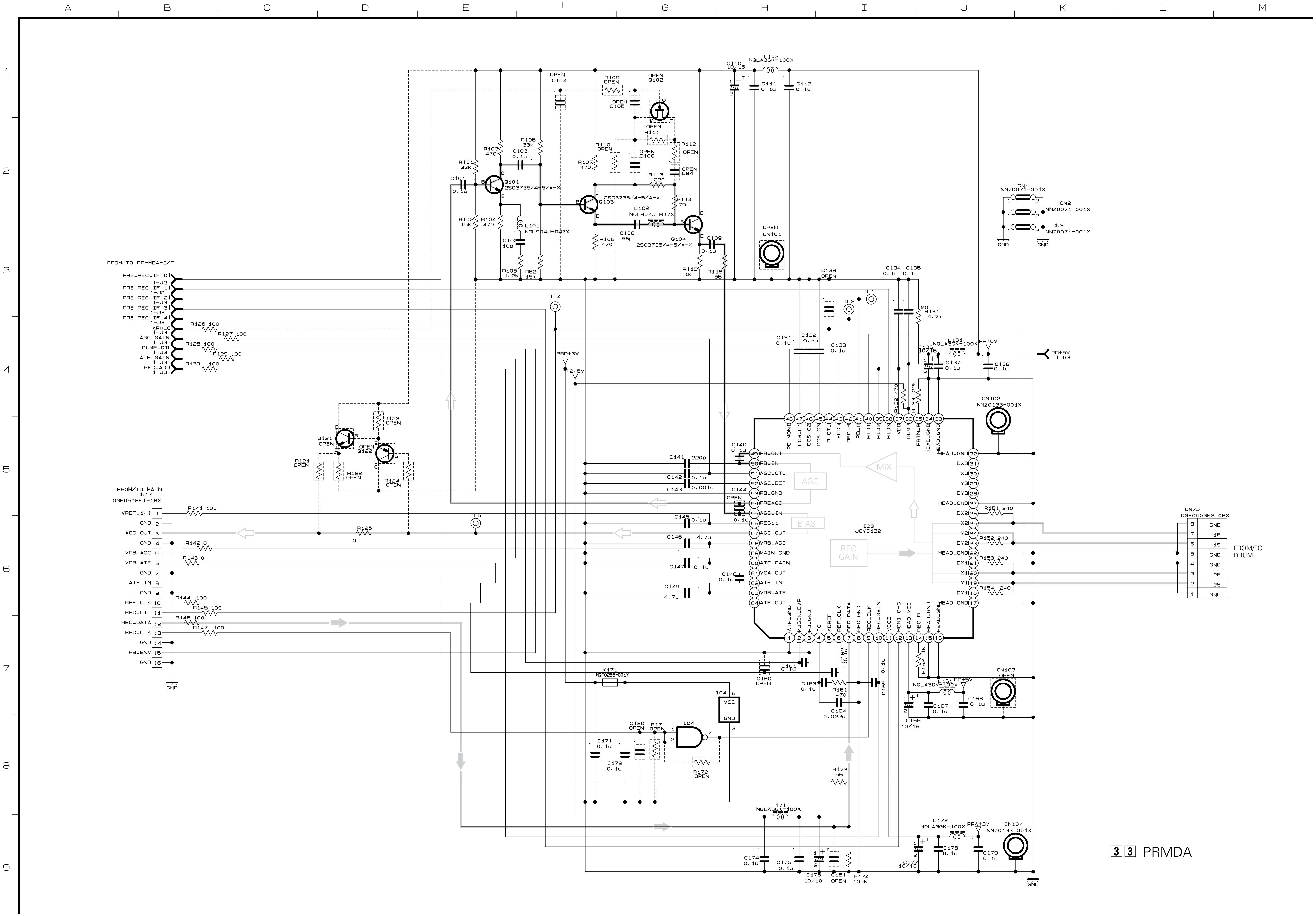
– SIDE A –


CN75
K50
C201
LC201
C202
R201
C203
R50
CN74
CN16
Q41
Q43
Q42
R38
R37
CN70
C204
L202
R202
C205
IC2
L50
C49
C50
C32
C31
R13
C14
C11
C15
C16
IC6
C214
C110
L103
C215
C216
R130
R129
R128
R127
R126
C206
C112
QA41
C44
C43
C42
C41
CN71
CN3
L101
R105
C102
R104
C138
C139
L13
C136
C133
C132
C131
C134
R131
C135
R132
R204
C218
C217
Q101
Q103
R106
Q104
L102
L201
C219
C220
R107
IC3
R151
R152
R153
R154
R162
CN73
C146
C147
C149
C45
C48
C47
C46
R36
C54
R49
C53
Q4
C52
D41
R114
R111
Q102
TP203
K201
C207
C208
IC1
C209
C210
C211
C203
C212
TP202
R203
R122
Q121
R123
Q122
R125
R161
C164
C163
C161
L171
C176
C171
K171
C172
C180
R171
R172
C177
L172
CN1
C166
L161
C168
C179
VR1
R147
R145
R144
R143
R142
R141
CN17
CN77
C40
CN72
PbF
CK279400A4
PRMDA PWB ASS'Y

– SIDE B –

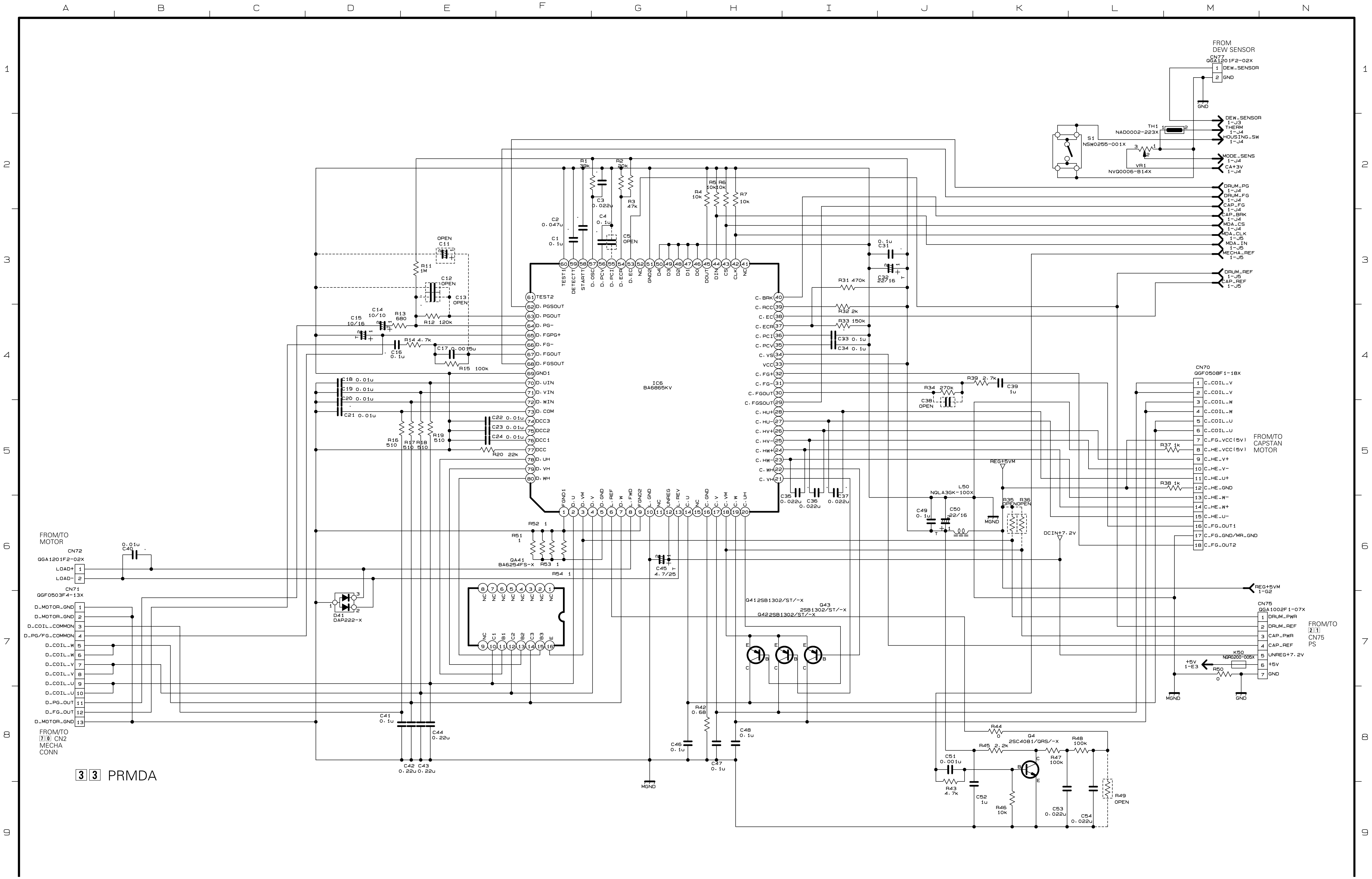

R32
R31
R33
C33
C34
R19
R18
R17
R16
R54
R53
R52
R51
C39
R42
C130
R173
R133
CN103
CN104
CN101
CN102
R146
S1
SC82794-04-001
PRMDA PWB

4.15 PRMDA SCHEMATIC DIAGRAMS (1/3)



A
B
C
D
E
F
G
H
I
J
K
L
M
1
2
3
4
5
6
7
8
9
FROM/TO PR-MDA-I/F
PRE_REC_IF[0]
PRE_REC_IF[1]
PRE_REC_IF[2]
PRE_REC_IF[3]
PRE_REC_IF[4]
APH_C
AGC_GAIN
DUMP_CTL
ATF_GAIN
REC_ADJ
1-J2
1-J3
R126 100
R127 100
R128 100
R129 100
R130 100
C101 0.1u
R101 33k
R103 470
R106 33k
C103 0.1u
Q101 2SC3735/4-5/A-X
R102 15k
R104 470
L101 NQL904J-R47X
C102 10p
R105 1.2k
R62 15k
OPEN C104
R109 OPEN
OPEN Q102
OPEN C105
R111
R112 OPEN
R110 OPEN
OPEN C106
OPEN C84
R107 470
R113 220
Q103 2SC3735/4-5/A-X
R114 75
L102 NQL904J-R47X
C108 56p
R108 470
Q104 2SC3735/4-5/A-X
C109 0.1u
R115 1k
R118 56
C110 10/16
L103 NQLA3GK-100X
C111 0.1u
C112 0.1u
OPEN CN101
C139 OPEN
C134 0.1u
C135 0.1u
TL1
TL2
TL4
TL5
R131 4.7k
C131 0.1u
C132 0.1u
C133 0.1u
L131 NQLA3GK-100X
PR+5V
PR+5V 1-G3
C136 10/16
C137 0.1u
C138 0.1u
PRD+3V
+2.5V
R132 470
R133 22k
CN102 NNZ0133-001X
CN1 NNZ0071-001X
CN2 NNZ0071-001X
CN3 NNZ0071-001X
GND
R123 OPEN
Q121 OPEN
OPEN Q122
R121 OPEN
R122 OPEN
R124 OPEN
FROM/TO MAIN
CN17
QGF0508F1-16X
VREF_1.1
GND
AGC_OUT
VRB_AGC
VRB_ATF
ATF_IN
REF_CLK
REC_CTL
REC_DATA
REC_CLK
PB_ENV
R141 100
R142 0
R143 0
R125 0
R144 100
R145 100
R146 100
R147 100
C140 0.1u
C141 220p
C142 0.1u
C143 0.001u
C144 OPEN
C145 0.1u
C146 4.7u
C147 0.1u
C148 0.1u
C149 4.7u
PB_OUT
PB_IN
AGC_CTL
AGC_DET
PB_GND
PREAGC
AGC_IN
REG11
AGC_OUT
VRB_AGC
MAIN_GND
ATF_GAIN
VCA_OUT
ATF_IN
VRB_ATF
ATF_OUT
PB_MONI
DCS_C1
DCS_C2
DCS_C3
R_CTL
VCC5
REC_H
PB_H
HID1
HID2
HID3
VDD
DUMP
PBIN_R
HEAD_GND
DX3
X3
Y3
DY3
DX2
X2
Y2
DY2
DX1
X1
Y1
DY1
ATF_GND
MUSIN_EVR
TC
ADREF
REF_CLK
REC_DATA
REC_GND
REC_CLK
REC_GAIN
VCC3
MONI_CHG
HEAD_VCC
REC_R
MIX
AGC
BIAS
REC GAIN
IC3 JCY0132
R151 240
R152 240
R153 240
R154 240
CN73 QGF0503F3-08X
1F
1S
2F
2S
FROM/TO DRUM
C160 OPEN
C161 0.1u
C162 0.1u
C163 0.1u
R161 470
C164 0.022u
C165 0.1u
R162 1k
L161 NQLA3GK-100X
PR+5V
CN103 OPEN
C166 10/16
C167 0.1u
C168 0.1u
K171 NQR0265-001X
IC4
VCC
C171 0.1u
C172 0.1u
C180 OPEN
R171 OPEN
R172 OPEN
R173 56
L171 NQLA3GK-100X
C174 0.1u
C175 0.1u
C176 10/10
C181 OPEN
R174 100k
L172 NQLA3GK-100X
PRA+3V
CN104 NNZ0133-001X
C177 10/10
C178 0.1u
C179 0.1u
33 PRMDA

— PRMDA SCHEMATIC DIAGRAMS (2/3) —



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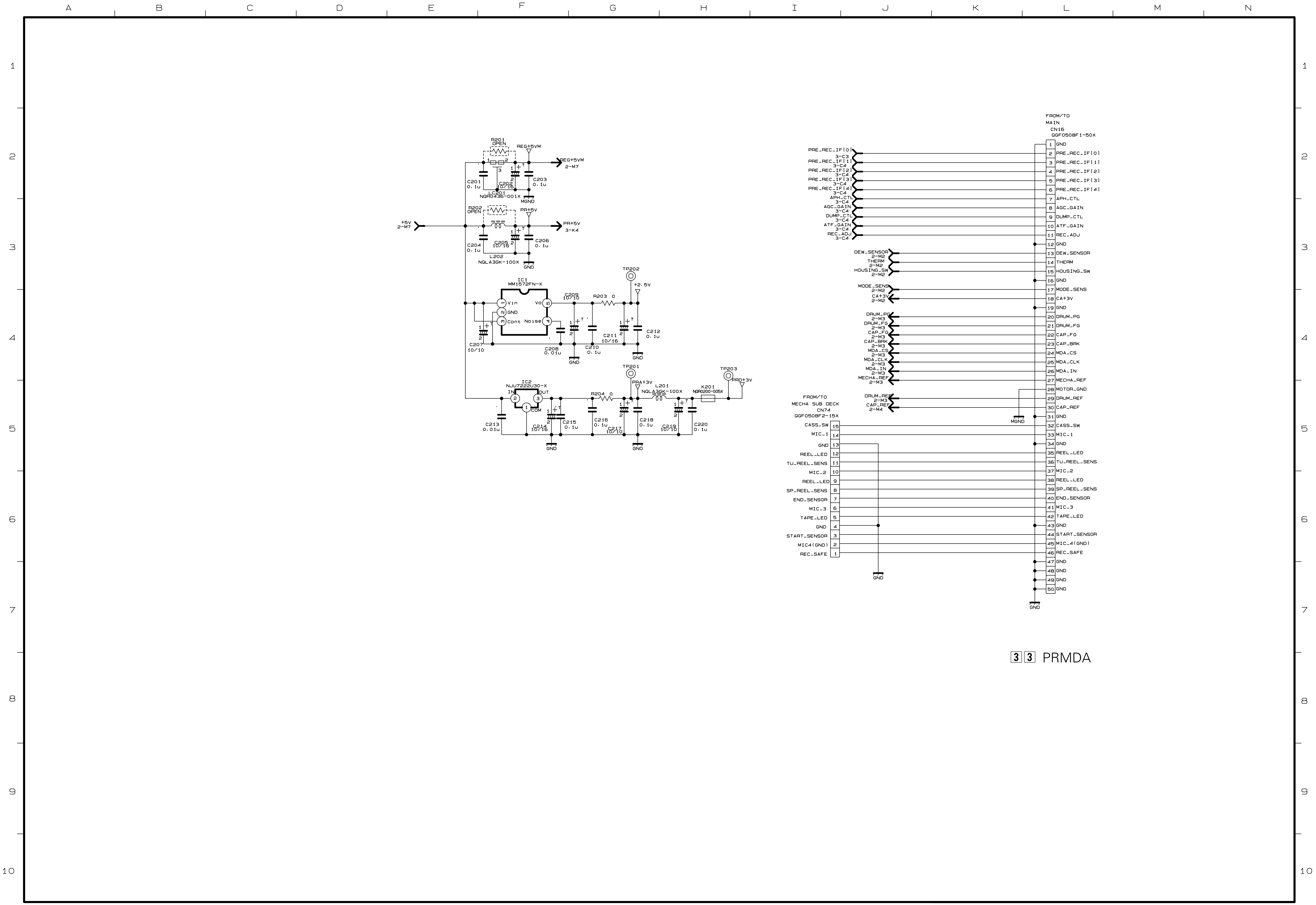
9
FROM DEW SENSOR
CN77 QGA1201F2-02X
1 DEW_SENSOR
2 GND
GND
DEW_SENSOR 1-J3
THERM 1-J4
HOUSING_SW 1-J4
MODE_SENS 1-J4
CA+3V 1-J4
DRUM_PG 1-J4
DRUM_FG 1-J4
CAP_FG 1-J4
CAP_BRK 1-J4
MDA_CS 1-J4
MDA_CLK 1-J5
MDA_IN 1-J5
MECHA_REF 1-J5
DRUM_REF 1-J5
CAP_REF 1-J5
TH1 NAD0002-223X
S1 NSW0255-001X
VR1 NVQ0006-B14X
R1 39k
R2 20k
R3 47k
C3 0.022u
C4 0.1u
C5 OPEN
C2 0.047u
C1 0.1u
R4 10k
R5 10k
R6 10k
R7 10k
C31 0.1u
C32 22/16
R31 470k
R32 2k
R33 150k
C33 0.1u
C34 0.1u
OPEN C11
R11 1M
C12 OPEN
C13 OPEN
C14 10/10
C15 10/16
R13 680
R12 120k
R14 4.7k
C16 0.1u
C17 0.0015u
R15 100k
C18 0.01u
C19 0.01u
C20 0.01u
C21 0.01u
C22 0.01u
C23 0.01u
C24 0.01u
R16 510
R17 510
R18 510
R19 510
R20 22k
IC6 BA6865KV
TEST1
DETECT1
START1
D.OSC
D.PCV
D.PCI
D.ECR
D.EC
NC
GND2
D4
D3
D2
D1
D0
DOUT
DIN
CS
CLK
NC
TEST2
D.PGSOUT
D.PGOUT
D.PG-
D.FGPG+
D.FG-
D.FGOUT
D.FGSOUT
GND1
D.UIN
D.VIN
D.WIN
D.COM
DCC3
DCC2
DCC1
DCC
D.UH
D.VH
D.WH
C.BRK
C.RCC
C.EC
C.ECR
C.PCI
C.PCV
C.VS
VCC
C.FG+
C.FG-
C.FGOUT
C.FGSOUT
C.HU+
C.HU-
C.HV+
C.HV-
C.HW+
C.HW-
C.WH
C.VH
FGND1
D.U
D.VM
D.V
D.GND
D.W
L.REF
D.FWD
GND2
L.GND
NC
UNREG
L.REV
C.U
NC
C.GND
C.V
C.VM
C.W
C.UH
R39 2.7k
C39 1u
R34 270k
C38 OPEN
REG+5VM
L50 NQL43GK-100X
C49 0.1u
C50 22/16
MGND
R35 OPEN
R36 OPEN
DCIN+7.2V
C35 0.022u
C36 0.022u
C37 0.022u
CN70 QGF0508F1-18X
1 C_COIL_V
2 C_COIL_V
3 C_COIL_W
4 C_COIL_W
5 C_COIL_U
6 C_COIL_U
7 C_FG_VCC(5V)
8 C_HE_VCC(5V)
9 C_HE_V+
10 C_HE_V-
11 C_HE_U+
12 C_HE_GND
13 C_HE_W-
14 C_HE_W+
15 C_HE_U-
16 C_FG_OUT1
17 C_FG_GND/MR_GND
18 C_FG_OUT2
R37 1k
R38 1k
FROM/TO CAPSTAN MOTOR
REG+5VM 1-G2
CN75 QGA1002F1-07X
1 DRUM_PWR
2 DRUM_REF
3 CAP_PWR
4 CAP_REF
5 UNREG+7.2V
6 +5V
7 GND
FROM/TO 2 1 CN75 PS
K50 NQR0200-005X
+5V 1-E3
R50 0
MGND
GND
FROM/TO MOTOR
CN72 QGA1201F2-02X
LOAD+ 1
LOAD- 2
0.01u C40
CN71 QGF0503F4-13X
D_MOTOR_GND 1
D_MOTOR_GND 2
D_COIL_COMMON 3
D_PG/FG_COMMON 4
D_COIL_W 5
D_COIL_W 6
D_COIL_V 7
D_COIL_V 8
D_COIL_U 9
D_COIL_U 10
D_PG_OUT 11
D_FG_OUT 12
D_MOTOR_GND 13
FROM/TO 7 0 CN2 MECHA CONN
D41 DAP222-X
R52 1
R51 1
QA41 BA6254FS-X
R53 1
R54 1
C45 4.7/25
NC NC NC NC NC NC NC NC
NC C1 B1 C2 B2 C3 B3 E
Q41 2SB1302/ST/-X
Q43 2SB1302/ST/-X
Q42 2SB1302/ST/-X
C41 0.1u
C44 0.22u
C42 0.22u
C43 0.22u
R42 0.68
C46 0.1u
C47 0.1u
C48 0.1u
MGND
R44 0
Q4 2SC4081/QRS/-X
R45 2.2k
R47 100k
R48 100k
C51 0.001u
R43 4.7k
C52 1u
R46 10k
C53 0.022u
C54 0.022u
R49 OPEN

3 3 PRMDA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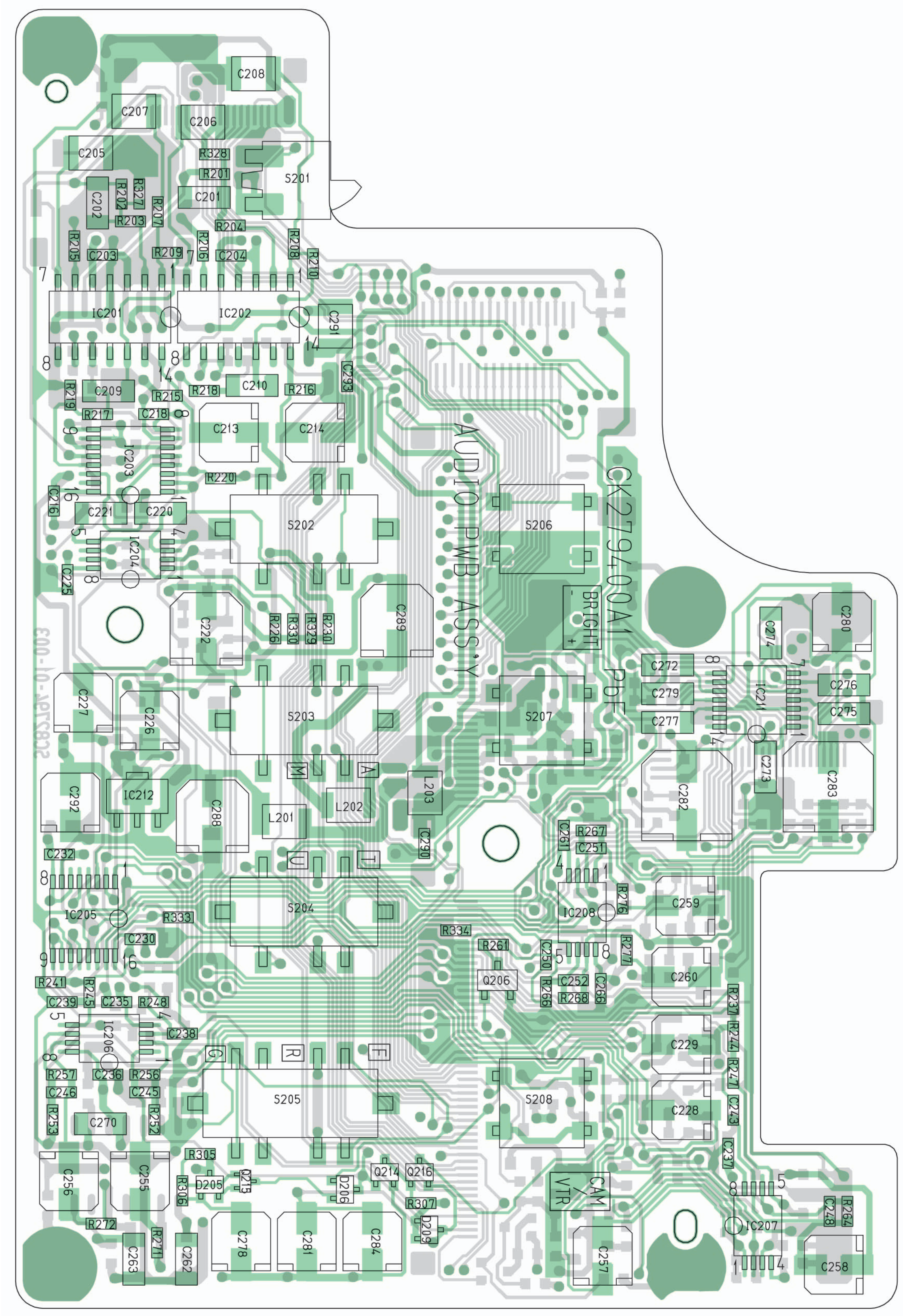
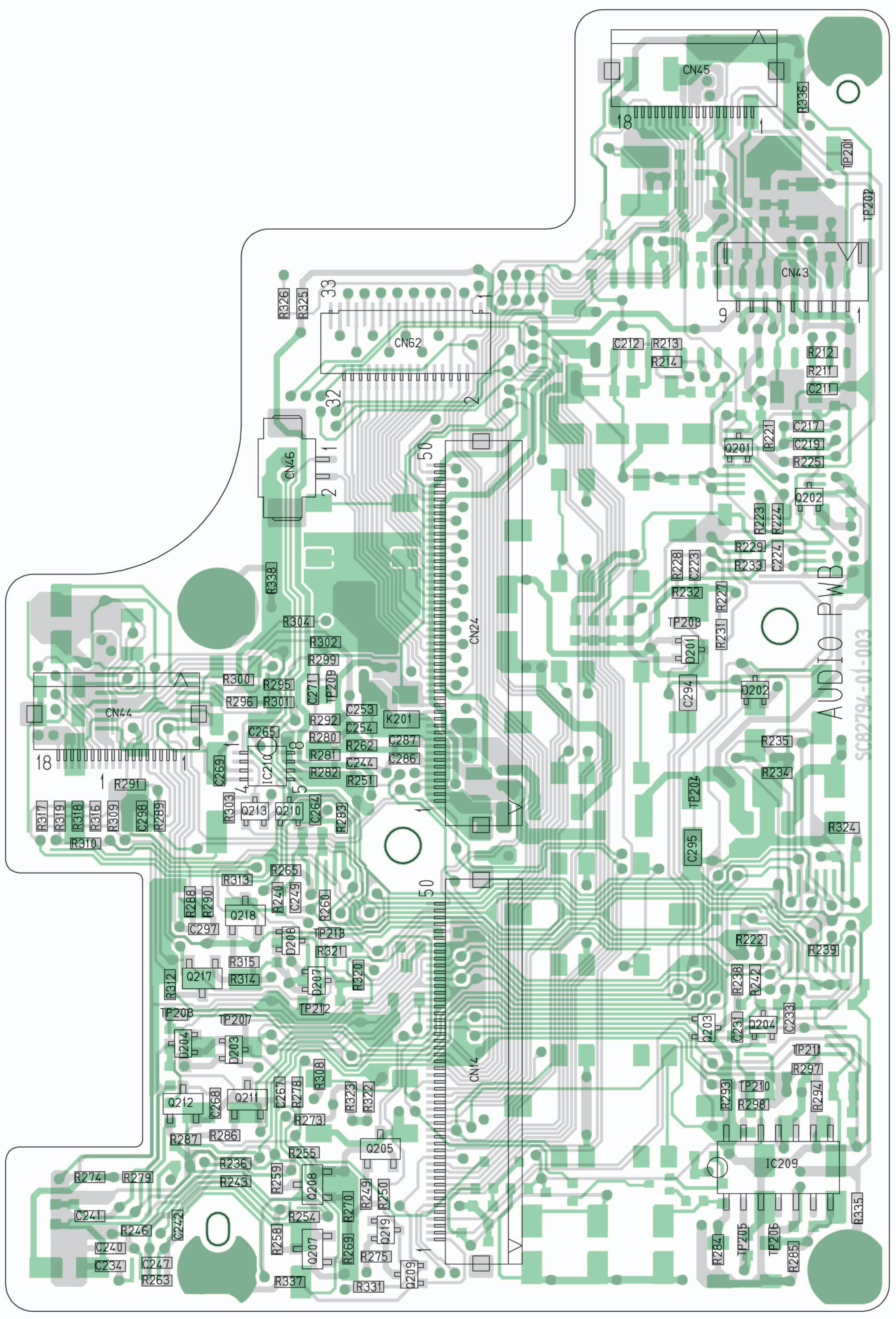
9
10
R201
OPEN
REG+5VM
REG+5VM
2-M7
C201
0.1u
C202
10/16
LC201
NQR0436-001X
C203
0.1u
MGND
R202
OPEN
PR+5V
+5V
2-M7
PR+5V
3-K4
C204
0.1u
C205
10/16
C206
0.1u
L202
NQLA3GK-100X
GND
IC1
MM1572FN-X
Vin
GND
Cont
Vo
Noise
C207
10/10
C208
0.01u
C209
10/10
C210
0.1u
R203 0
C211
10/16
TP202
+2.5V
C212
0.1u
IC2
NJU7222U30-X
IN
OUT
COM
C213
0.01u
C214
10/16
C215
0.1u
R204 0
C216
0.1u
C217
10/10
TP201
PRA+3V
C218
0.1u
L201
NQLA3GK-100X
C219
10/10
K201
NQR0200-005X
C220
0.1u
TP203
PRD+3V
FROM/TO
MAIN
CN16
QGF0508F1-50X
PRE_REC_IF[0] 3-C3
PRE_REC_IF[1] 3-C4
PRE_REC_IF[2] 3-C4
PRE_REC_IF[3] 3-C4
PRE_REC_IF[4] 3-C4
APH_CTL 3-C4
AGC_GAIN 3-C4
DUMP_CTL 3-C4
ATF_GAIN 3-C4
REC_ADJ 3-C4
DEW_SENSOR 2-M2
THERM 2-M2
HOUSING_SW 2-M2
MODE_SENS 2-M2
CA+3V 2-M2
DRUM_PG 2-M3
DRUM_FG 2-M3
CAP_FG 2-M3
CAP_BRK 2-M3
MDA_CS 2-M3
MDA_CLK 2-M3
MDA_IN 2-M3
MECHA_REF 2-M3
DRUM_REF 2-M3
CAP_REF 2-M4
1 GND
2 PRE_REC_IF[0]
3 PRE_REC_IF[1]
4 PRE_REC_IF[2]
5 PRE_REC_IF[3]
6 PRE_REC_IF[4]
7 APH_CTL
8 AGC_GAIN
9 DUMP_CTL
10 ATF_GAIN
11 REC_ADJ
12 GND
13 DEW_SENSOR
14 THERM
15 HOUSING_SW
16 GND
17 MODE_SENS
18 CA+3V
19 GND
20 DRUM_PG
21 DRUM_FG
22 CAP_FG
23 CAP_BRK
24 MDA_CS
25 MDA_CLK
26 MDA_IN
27 MECHA_REF
28 MOTOR_GND
29 DRUM_REF
30 CAP_REF
31 GND
32 CASS_SW
33 MIC_1
34 GND
35 REEL_LED
36 TU_REEL_SENS
37 MIC_2
38 REEL_LED
39 SP_REEL_SENS
40 END_SENSOR
41 MIC_3
42 TAPE_LED
43 GND
44 START_SENSOR
45 MIC_4(GND)
46 REC_SAFE
47 GND
48 GND
49 GND
50 GND
MGND
GND
FROM/TO
MECHA SUB DECK
CN74
QGF0508F2-15X
CASS_SW 15
MIC_1 14
GND 13
REEL_LED 12
TU_REEL_SENS 11
MIC_2 10
REEL_LED 9
SP_REEL_SENS 8
END_SENSOR 7
MIC_3 6
TAPE_LED 5
GND 4
START_SENSOR 3
MIC4(GND) 2
REC_SAFE 1
GND
3 3 PRMDA

4.16 AUDIO CIRCUIT BOARD

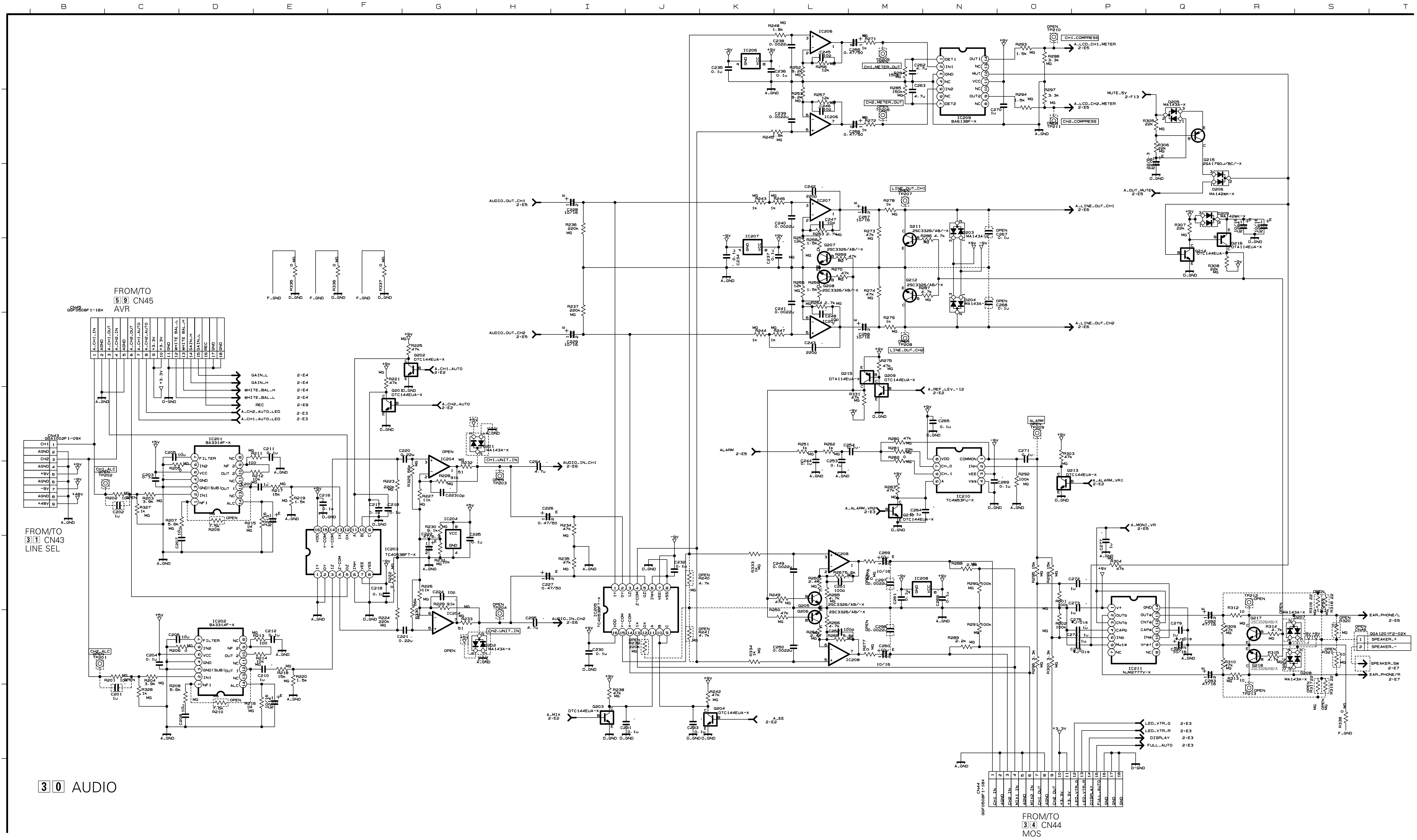
— SIDE A —


AUDIO PWB ASS'Y
CKZ79400A1
PbF
BRIGHT
CAM
VTR
IC201
IC202
IC203
IC204
IC205
IC206
IC207
IC208
IC211
IC212
S201
S202
S203
S204
S205
S206
S207
S208
L201
L202
L203
Q206
Q214
Q216
D205
D206
D209
C208
C207
C206
C205
C201
C202
C203
C204
C209
C210
C213
C214
C221
C220
C272
C279
C277
C274
C280
C276
C275
C282
C283
C259
C260
C229
C228
C258
C257
C278
C281
C284
C270
C256
C255
C263
C262
R201
R328
R209
R215
R216
R218
R220
R261
R267
R276
R305
R306
R307
R333
R334

— SIDE B —

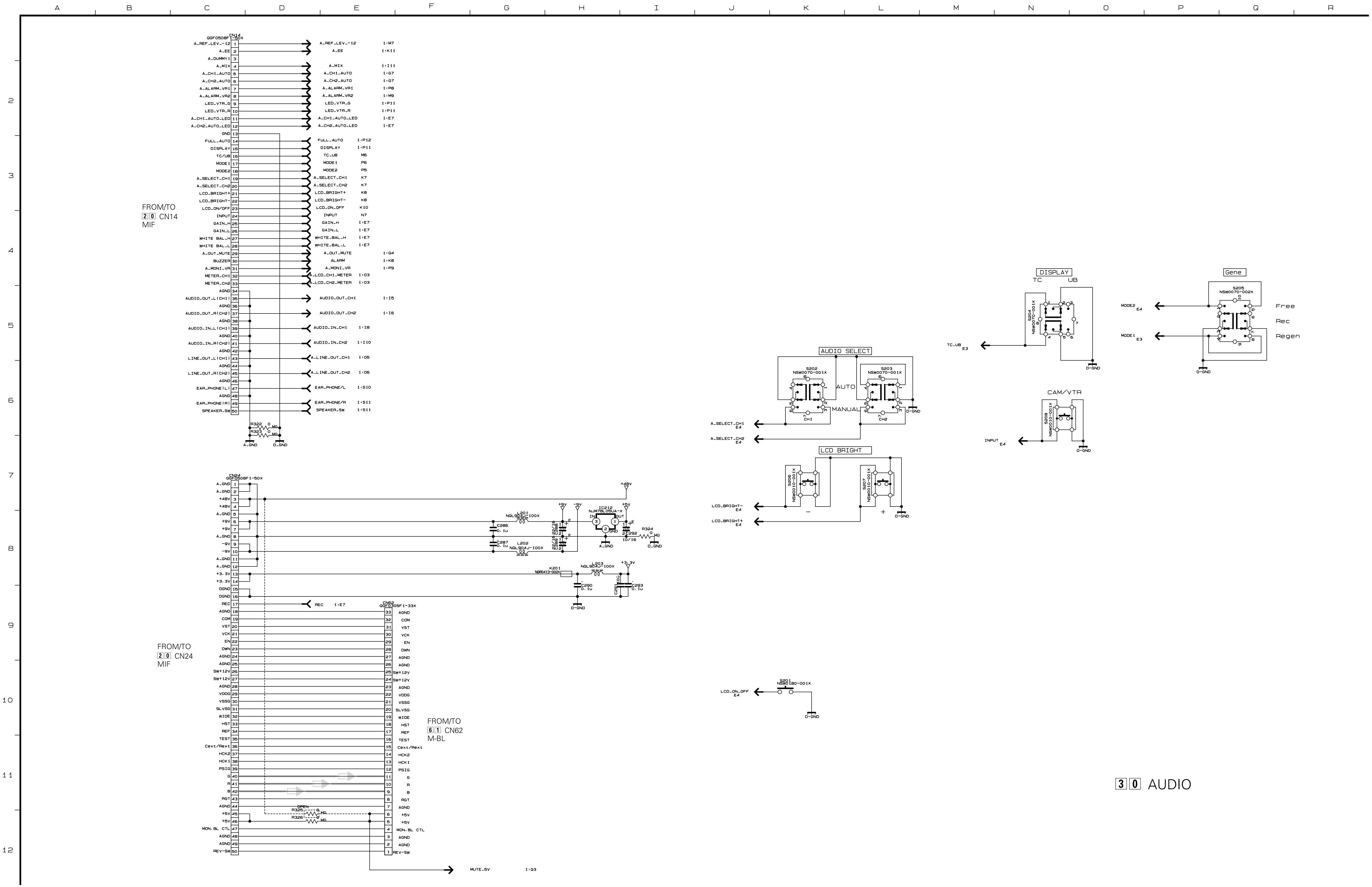

AUDIO PWB
SC82794-01-003
CN45
CN43
CN62
CN46
CN44
CN24
CN14
IC209
IC210
Q201
Q202
Q204
Q205
Q207
Q208
Q210
Q211
Q212
Q213
Q217
Q218
Q219
D201
D202
D203
D204
D207
D208
K201
TP201
TP202
TP204
TP205
TP206
TP207
TP208
TP209
TP210
TP211
TP212
TP213
R335
R336
R212
R213
R214
R211
C211
C212
C217
C219
R225
R324
R239
R222

4.17 AUDIO SCHEMATIC DIAGRAMS (1/2)



FROM/TO 59 CN45 AVR
CN45 QGF0508F1-18X
GAIN_L
GAIN_H
WHITE_BAL_H
WHITE_BAL_L
REC
A_CH2_AUTO_LED
A_CH1_AUTO_LED
CN43 QGA1002F1-09X
FROM/TO 31 CN43 LINE SEL
CH1_ALC
CH2_ALC
IC201 BA3314F-X
IC202 BA3314F-X
IC203 TC4053BFT-X
IC204
IC205 TC4053BFT-X
IC206
IC207
IC208
IC209 BA6138F-X
IC210 TC4W53FU-X
IC211 NJM2777V-X
AUDIO_OUT_CH1
AUDIO_OUT_CH2
AUDIO_IN_CH1
AUDIO_IN_CH2
A_CH1_AUTO
A_CH2_AUTO
CH1_UNIT_IN
CH2_UNIT_IN
CH1_METER_OUT
CH2_METER_OUT
CH1_COMPRESS
CH2_COMPRESS
A_LCD_CH1_METER
A_LCD_CH2_METER
MUTE_5V
A_OUT_MUTE
A_LINE_OUT_CH1
A_LINE_OUT_CH2
LINE_OUT_CH1
LINE_OUT_CH2
A_REF_LEV_-12
ALARM
A_ALARM_VR1
A_ALARM_VR2
A_MONI_VR
A_MIX
A_EE
EAR_PHONE/L
EAR_PHONE/R
SPEAKER_+
SPEAKER_-
SPEAKER_SW
CN46 QGA1201F2-02X
LED_VTR_G
LED_VTR_R
DISPLAY
FULL_AUTO
CN44 QGF0508F1-18X
FROM/TO 34 CN44 MOS
30 AUDIO

— AUDIO SCHEMATIC DIAGRAMS (2/2) —


A
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P
Q
R
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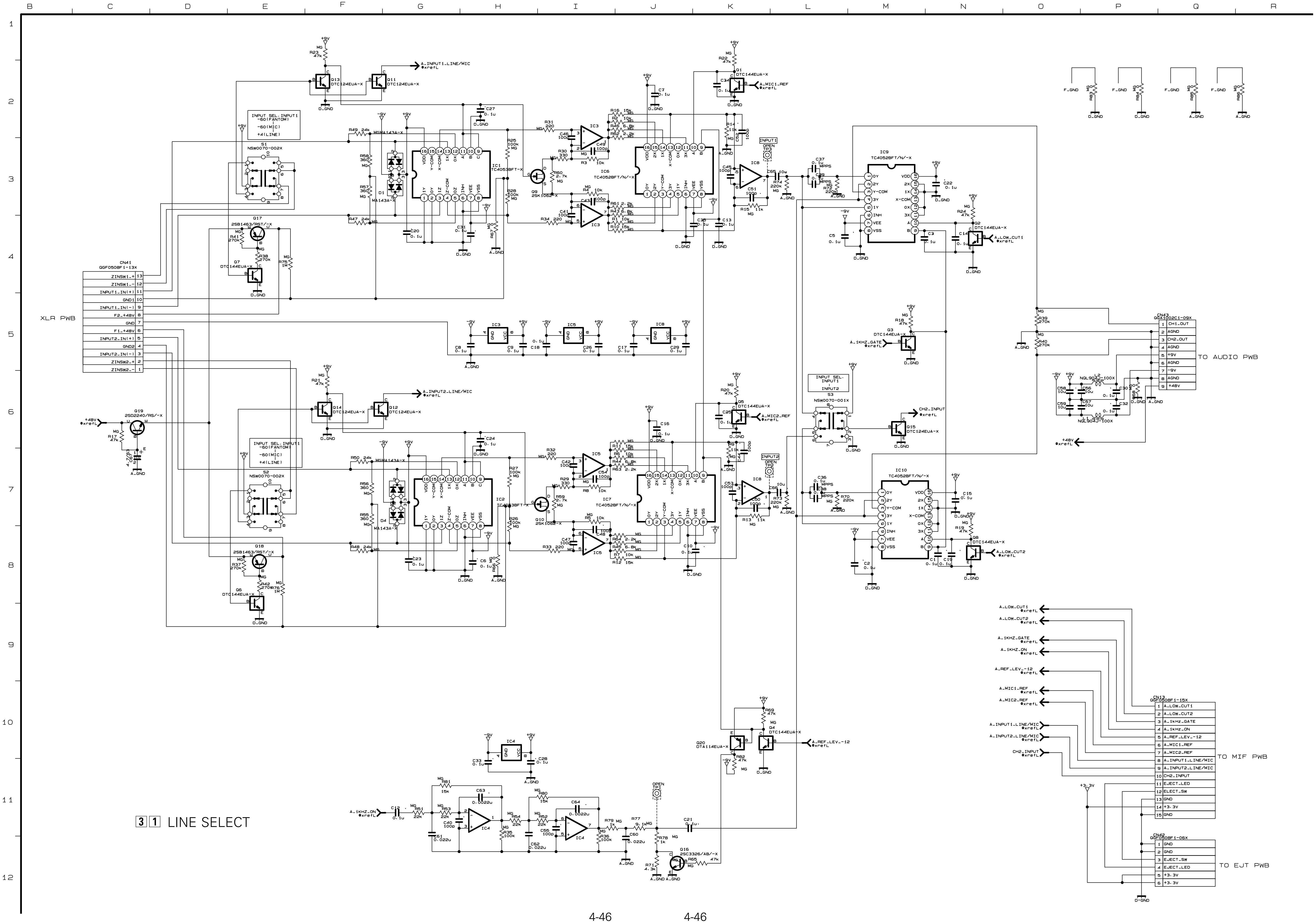
12
CN14
QGF0508F1-50X
A_REF_LEV_-12 1 → A_REF_LEV_-12 1:M7
A_EE 2 → A_EE 1:K11
A_DUMMY1 3
A_MIX 4 → A_MIX 1:I11
A_CH1_AUTO 5 → A_CH1_AUTO 1:G7
A_CH2_AUTO 6 → A_CH2_AUTO 1:G7
A_ALARM_VR1 7 → A_ALARM_VR1 1:P8
A_ALARM_VR2 8 → A_ALARM_VR2 1:M9
LED_VTR_G 9 → LED_VTR_G 1:P11
LED_VTR_R 10 → LED_VTR_R 1:P11
A_CH1_AUTO_LED 11 → A_CH1_AUTO_LED 1:E7
A_CH2_AUTO_LED 12 → A_CH2_AUTO_LED 1:E7
GND 13
FULL_AUTO 14 ← FULL_AUTO 1:P12
DISPLAY 15 ← DISPLAY 1:P11
TC/UB 16 ← TC_UB M6
MODE1 17 ← MODE1 P6
MODE2 18 ← MODE2 P5
A_SELECT_CH1 19 ← A_SELECT_CH1 K7
A_SELECT_CH2 20 ← A_SELECT_CH2 K7
LCD_BRIGHT+ 21 ← LCD_BRIGHT+ K8
LCD_BRIGHT- 22 ← LCD_BRIGHT- K8
LCD_ON/OFF 23 ← LCD_ON_OFF K10
INPUT 24 ← INPUT N7
GAIN_H 25 ← GAIN_H 1:E7
GAIN_L 26 ← GAIN_L 1:E7
WHITE BAL_H 27 ← WHITE_BAL_H 1:E7
WHITE BAL_L 28 ← WHITE_BAL_L 1:E7
A_OUT_MUTE 29 → A_OUT_MUTE 1:Q4
BUZZER 30 → ALARM 1:K8
A_MONI_VR 31 → A_MONI_VR 1:P9
METER_CH1 32 ← A_LCD_CH1_METER 1:O3
METER_CH2 33 ← A_LCD_CH2_METER 1:O3
AGND 34
AUDIO_OUT_L(CH1) 35 → AUDIO_OUT_CH1 1:I5
AGND 36
AUDIO_OUT_R(CH2) 37 → AUDIO_OUT_CH2 1:I6
AGND 38
AUDIO_IN_L(CH1) 39 ← AUDIO_IN_CH1 1:I8
AGND 40
AUDIO_IN_R(CH2) 41 ← AUDIO_IN_CH2 1:I10
AGND 42
LINE_OUT_L(CH1) 43 ← A_LINE_OUT_CH1 1:O5
AGND 44
LINE_OUT_R(CH2) 45 ← A_LINE_OUT_CH2 1:O6
AGND 46
EAR_PHONE(L) 47 ← EAR_PHONE/L 1:S10
AGND 48
EAR_PHONE(R) 49 ← EAR_PHONE/R 1:S11
SPEAKER_SW 50 ← SPEAKER_SW 1:S11
R322 0 MG
R323 0 MG
A_GND
D_GND
FROM/TO
20 CN14
MIF
CN24
QGF0508F1-50X
A_GND 1
A_GND 2
+48V 3
+48V 4
A_GND 5
+9V 6
+9V 7
A_GND 8
-9V 9
-9V 10
A_GND 11
A_GND 12
+3.3V 13
+3.3V 14
DGND 15
DGND 16
REC 17 ← REC 1:E7
+48V
L201 NQL904J-100X
L202 NQL904J-100X
C286 0.1u
C287 0.1u
C288 22/16
C289 22/16
+9V
-9V
IC212 NJM78L05UA-X
IN OUT GND
+5V
C292 10/16
R324 0 MG
A_GND
D_GND
K201 NQR0413-002X
L203 NQL904J-100X
+3.3V
C290 0.1u
C291 10u
C293 0.1u
D-GND
FROM/TO
20 CN24
MIF
CN62
QGF0305F1-33X
AGND 18 — 33 AGND
COM 19 — 32 COM
VST 20 — 31 VST
VCK 21 — 30 VCK
EN 22 — 29 EN
DWN 23 — 28 DWN
AGND 24 — 27 AGND
AGND 25 — 26 AGND
SW+12V 26 — 25 SW+12V
SW+12V 27 — 24 SW+12V
AGND 28 — 23 AGND
VDDG 29 — 22 VDDG
VSSG 30 — 21 VSSG
SLVSG 31 — 20 SLVSG
WIDE 32 — 19 WIDE
HST 33 — 18 HST
REF 34 — 17 REF
TEST 35 — 16 TEST
Cext/Rext 36 — 15 Cext/Rext
HCK2 37 — 14 HCK2
HCK1 38 — 13 HCK1
PSIG 39 — 12 PSIG
G 40 — 11 G
R 41 — 10 R
B 42 — 9 B
RGT 43 — 8 RGT
AGND 44 — 7 AGND
+5V 45 — 6 +5V
+5V 46 — 5 +5V
MON.BL CTL 47 — 4 MON.BL CTL
AGND 48 — 3 AGND
AGND 49 — 2 AGND
REV-SW 50 — 1 REV-SW
OPEN
R325 0 MG
R326 0 MG
MUTE_5V 1:Q3
FROM/TO
61 CN62
M-BL
AUDIO SELECT
S202 NSW0070-001X
S203 NSW0070-001X
AUTO
MANUAL
CH1
CH2
D-GND
A_SELECT_CH1 E4
A_SELECT_CH2 E4
LCD BRIGHT
S206 NSW0010-001X
S207 NSW0010-001X
-
+
LCD_BRIGHT- E4
LCD_BRIGHT+ E4
D-GND
DISPLAY
TC UB
S204 NSW0070-001X
TC_UB E3
D-GND
Gene
S205 NSW0070-002X
Free
Rec
Regen
MODE2 E4
MODE1 E3
D-GND
CAM/VTR
S208 NSW0010-001X
INPUT E4
D-GND
S201 NSW0180-001X
LCD_ON_OFF E4
D-GND
30 AUDIO

4.18 LINE SELECT SCHEMATIC DIAGRAM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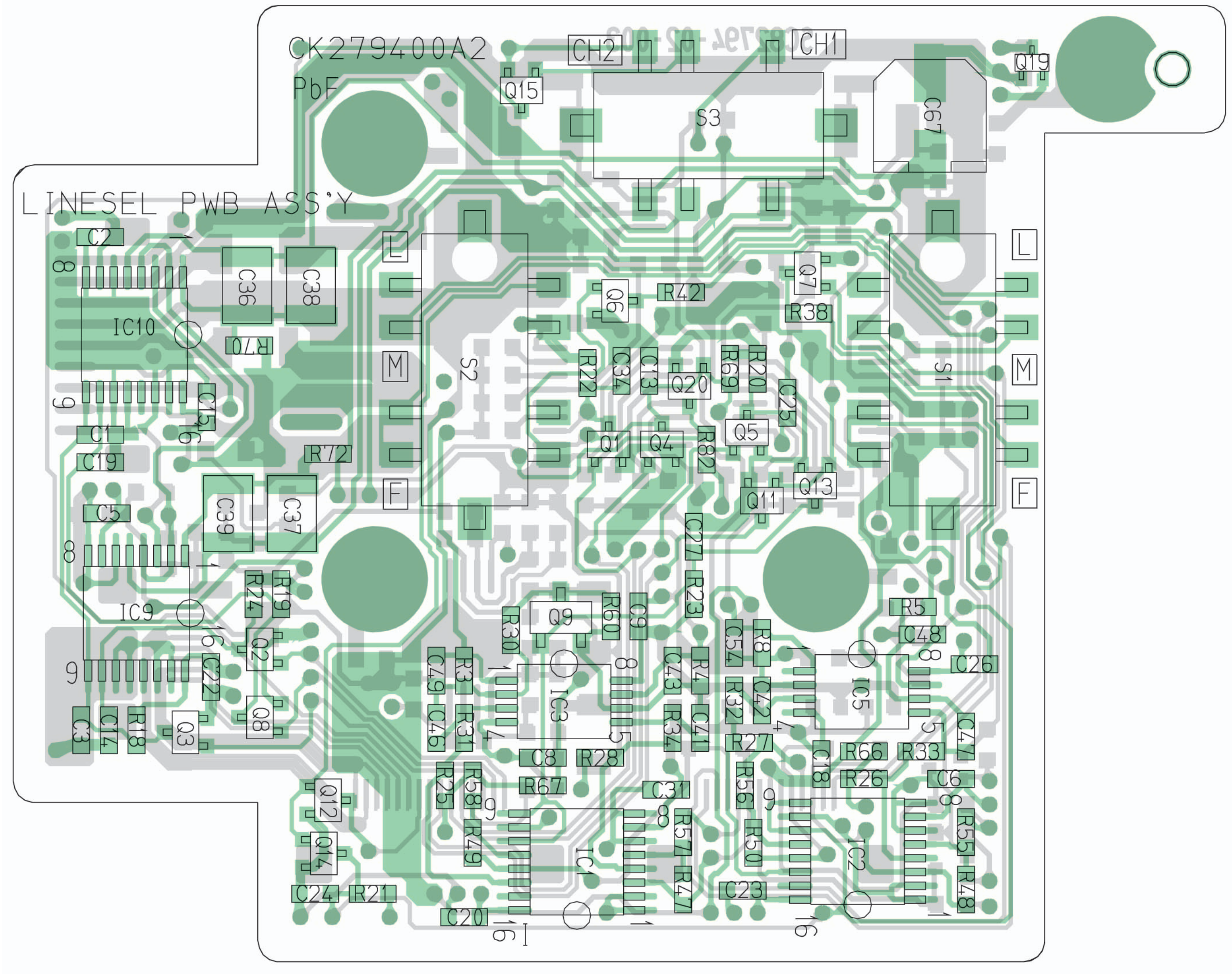
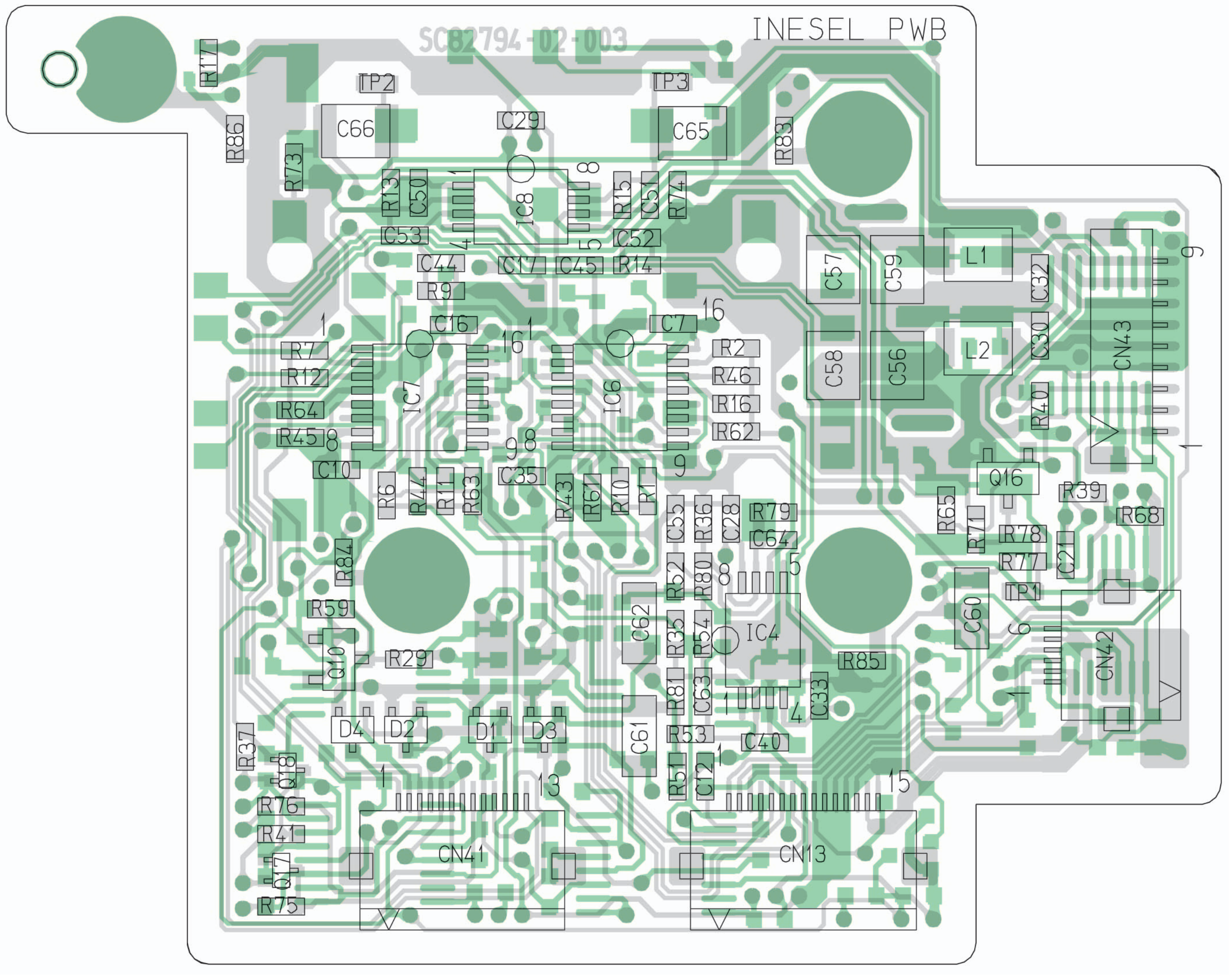
10
11
12
XLR PWB
CN41
QGF0508F1-13X
ZINSW1_+ 13
ZINSW1_- 12
INPUT1_IN(+) 11
GND1 10
INPUT1_IN(-) 9
F2_+48V 8
GND 7
F1_+48V 6
INPUT2_IN(+) 5
GND2 4
INPUT2_IN(-) 3
ZINSW2_+ 2
ZINSW2_- 1
Q19
2SD2240/RS/-X
+48V
@xrefL
Q13
DTC124EUA-X
Q11
DTC124EUA-X
A_INPUT1_LINE/MIC
@xrefL
Q14
DTC124EUA-X
Q12
DTC124EUA-X
A_INPUT2_LINE/MIC
@xrefL
INPUT SEL:INPUT1
-60(FANTOM)
-60(MIC)
+4(LINE)
S1
NSW0070-002X
S2
NSW0070-002X
Q17
2SB1463/RST/-X
Q18
2SB1463/RST/-X
Q7
DTC144EUA-X
Q6
DTC144EUA-X
D1
MA143A-X
D4
MA143A-X
IC1
TC4053BFT-X
IC2
TC4053BFT-X
Q9
2SK1062-X
Q10
2SK1062-X
IC3
IC5
IC6
TC4052BFT/N/-X
IC7
TC4052BFT/N/-X
IC8
IC9
TC4052BFT/N/-X
IC10
TC4052BFT/N/-X
IC4
INPUT1
OPEN
TP3
INPUT2
OPEN
TP2
OPEN
TP1
Q1
DTC144EUA-X
A_MIC1_REF
@xrefL
Q5
DTC144EUA-X
A_MIC2_REF
@xrefL
Q2
DTC144EUA-X
A_LOW_CUT1
@xrefL
Q8
DTC144EUA-X
A_LOW_CUT2
@xrefL
Q3
DTC144EUA-X
A_1KHZ_GATE
@xrefL
INPUT SEL:
INPUT1
INPUT2
S3
NSW0070-001X
Q15
DTC124EUA-X
CH2_INPUT
@xrefL
Q20
DTA114EUA-X
Q4
DTC144EUA-X
A_REF_LEV_-12
@xrefL
Q16
2SC3326/AB/-X
A_1KHZ_ON
@xrefL
F_GND
D_GND
A_GND
+9V
-9V
MG
R39
270k
R40
270k
L2
NQL904J-100X
L1
NQL904J-100X
C58
10u
C56
10u
C59
10u
C57
10u
C30
0.1u
C32
0.1u
R68
CN43
QGA1002C1-09X
1 CH1_OUT
2 AGND
3 CH2_OUT
4 AGND
5 +9V
6 AGND
7 -9V
8 AGND
9 +48V
TO AUDIO PWB
+48V
@xrefL
A_LOW_CUT1
@xrefL
A_LOW_CUT2
@xrefL
A_1KHZ_GATE
@xrefL
A_1KHZ_ON
@xrefL
A_REF_LEV_-12
@xrefL
A_MIC1_REF
@xrefL
A_MIC2_REF
@xrefL
A_INPUT1_LINE/MIC
@xrefL
A_INPUT2_LINE/MIC
@xrefL
CH2_INPUT
@xrefL
CN13
QGF0508F1-15X
1 A_LOW_CUT1
2 A_LOW_CUT2
3 A_1kHz_GATE
4 A_1kHz_ON
5 A_REF_LEV_-12
6 A_MIC1_REF
7 A_MIC2_REF
8 A_INPUT1_LINE/MIC
9 A_INPUT2_LINE/MIC
10 CH2_INPUT
11 EJECT_LED
12 ELECT_SW
13 GND
14 +3.3V
15 GND
TO MIF PWB
+3.3V
CN42
QGF0508F1-06X
1 GND
2 GND
3 EJECT_SW
4 EJECT_LED
5 +3.3V
6 +3.3V
TO EJT PWB
D-GND
3 1 LINE SELECT

4.19 LINE SELECT CIRCUIT BOARD

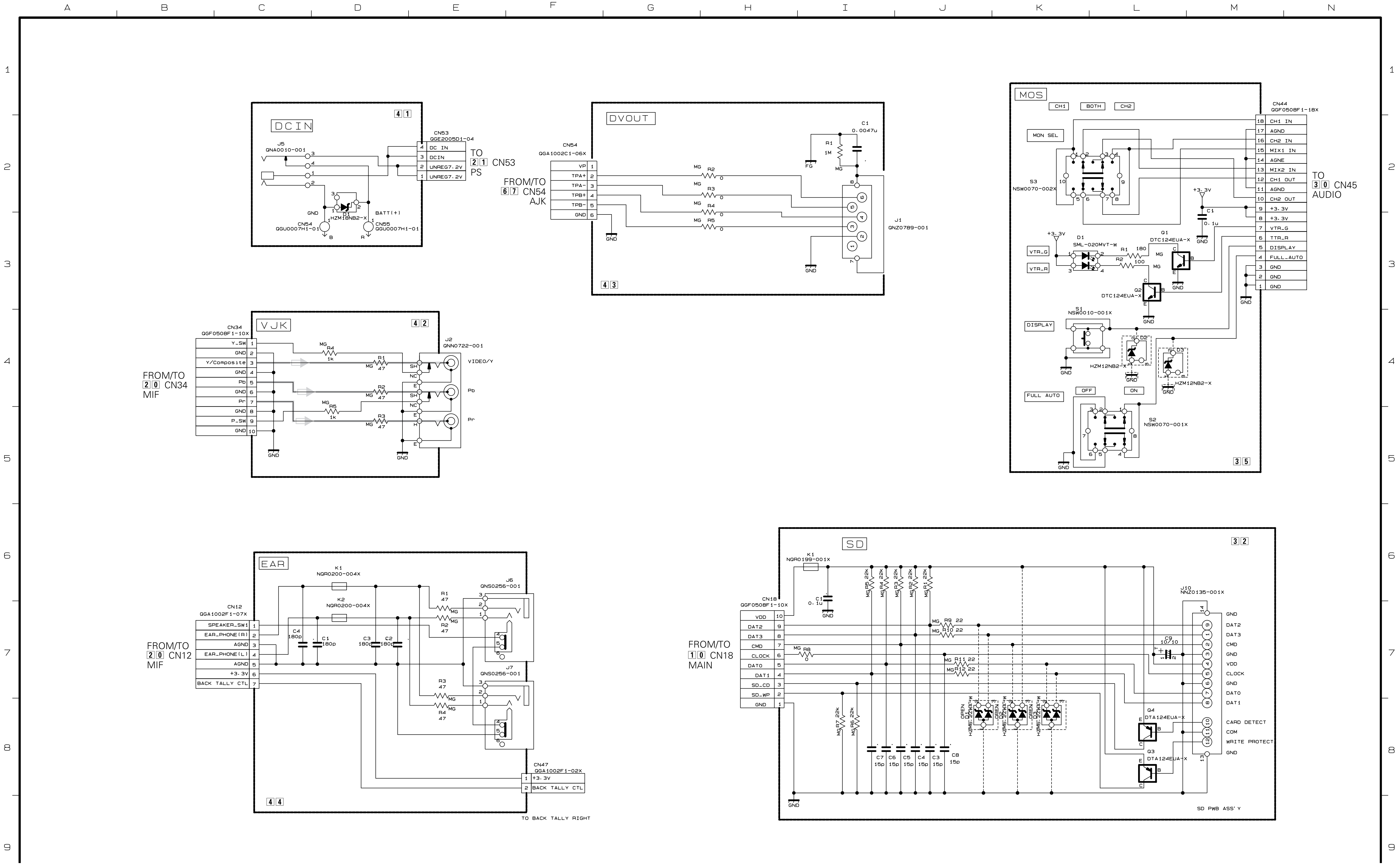
– SIDE A –


CK279400A2
PbF
CH2
CH1
Q15
S3
C67
Q19
LINESEL PWB ASS'Y
C2
C36
C38
IC10
R70
C15
C1
C19
R72
C5
C39
C37
IC9
R74
R19
Q2
C22
Q8
C3
R18
Q3
Q12
Q14
C24
R21
C20
S2
S1
L
M
F
Q6
R42
Q7
R38
R22
C34
C13
Q20
R69
R20
C25
Q1
Q4
R82
Q5
Q11
Q13
C27
R23
R5
C48
C26
Q9
R30
R60
C9
C49
C46
R3
R31
IC3
C43
R34
C54
R32
R8
C42
C41
R4
IC5
R27
C18
R66
R33
C47
C8
R28
R25
R58
R49
R67
C31
IC1
R57
R47
R56
R50
C23
IC2
R55
R48
R26
C6

– SIDE B –


INESEL PWB
SCB2794-02-003
R17
TP2
TP3
C66
C29
C65
R86
R73
R83
R13
C50
IC8
R15
C51
R74
C53
C52
C44
C17
C45
R14
R9
C16
C7
R7
R12
R64
R45
C10
IC7
IC6
R2
R46
R16
R62
C57
C59
L1
C32
C58
C56
L2
C30
CN43
R40
Q16
R39
R68
R6
R44
R11
R63
C35
R43
R61
R10
R1
C55
R36
C28
R79
C64
R65
R71
R78
R77
C21
TP1
R84
R59
R52
R80
IC4
C62
R35
R54
C60
CN42
Q10
R29
R85
D4
D2
D1
D3
C61
R81
C63
C33
R53
C40
R37
Q18
R76
R41
Q17
R75
R51
C12
CN41
CN13

4.20 OPERATION-1 & ETC (MOS, DVOUT, V JK, EAR, DC IN & SD) SCHEMATIC DIAGRAMS

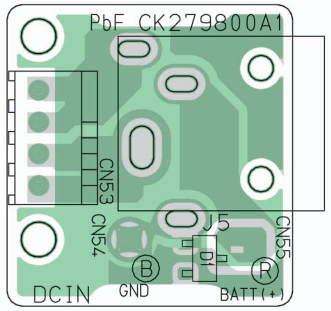


A B C D E F G H I J K L M N
1 2 3 4 5 6 7 8 9
DCIN
4 1
J5
QNA0010-001
CN53
QGE2005D1-04
4 DC IN
3 DCIN
2 UNREG7.2V
1 UNREG7.2V
TO
2 1 CN53
PS
D1
HZM18NB2-X
GND
BATT(+)
CN54
QGU0007H1-01
CN55
QGU0007H1-01
DVOUT
CN54
QGA1002C1-06X
VP 1
TPA+ 2
TPA- 3
TPB+ 4
TPB- 5
GND 6
FROM/TO
6 7 CN54
AJK
R2 0
R3 0
R4 0
R5 0
R1 1M
C1 0.0047u
FG
J1
QNZ0789-001
4 3
MOS
CH1
BOTH
CH2
MON SEL
S3
NSW0070-002X
CN44
QGF0508F1-18X
18 CH1 IN
17 AGND
16 CH2 IN
15 MIX1 IN
14 AGNE
13 MIX2 IN
12 CH1 OUT
11 AGND
10 CH2 OUT
9 +3.3V
8 +3.3V
7 VTR_G
6 TTR_R
5 DISPLAY
4 FULL_AUTO
3 GND
2 GND
1 GND
TO
3 0 CN45
AUDIO
+3.3V
C1 0.1u
D1
SML-020MVT-W
VTR_G
VTR_R
R1 180
R2 100
Q1
DTC124EUA-X
Q2
DTC124EUA-X
S1
NSW0010-001X
DISPLAY
D2
HZM12NB2-X
D3
HZM12NB2-X
FULL AUTO
OFF
ON
S2
NSW0070-001X
3 5
VJK
4 2
CN34
QGF0508F1-10X
Y_SW 1
GND 2
Y/Composite 3
GND 4
Pb 5
GND 6
Pr 7
GND 8
P_SW 9
GND 10
FROM/TO
2 0 CN34
MIF
R4 1k
R1 47
R2 47
R5 1k
R3 47
J2
QNN0722-001
VIDEO/Y
Pb
Pr
EAR
K1
NQR0200-004X
K2
NQR0200-004X
CN12
QGA1002F1-07X
SPEAKER_SW1 1
EAR_PHONE(R) 2
AGND 3
EAR_PHONE(L) 4
AGND 5
+3.3V 6
BACK TALLY CTL 7
FROM/TO
2 0 CN12
MIF
C4 180p
C1 180p
C3 180p
C2 180p
R1 47
R2 47
R3 47
R4 47
J6
QNS0256-001
J7
QNS0256-001
CN47
QGA1002F1-02X
1 +3.3V
2 BACK TALLY CTL
TO BACK TALLY RIGHT
4 4
SD
3 2
K1
NQR0199-001X
C1 0.1u
CN18
QGF0508F1-10X
VDD 10
DAT2 9
DAT3 8
CMD 7
CLOCK 6
DAT0 5
DAT1 4
SD_CD 3
SD_WP 2
GND 1
FROM/TO
1 0 CN18
MAIN
R6 22k
R4 22k
R3 22k
R2 22k
R1 22k
R7 22k
R5 22k
R8 0
R9 22
R10 22
R11 22
R12 22
C7 15p
C6 15p
C5 15p
C4 15p
C3 15p
C8 15p
C9 10/10
HZM6.2ZWA-W
OPEN
J10
NNZ0135-001X
GND
DAT2
DAT3
CMD
GND
VDD
CLOCK
GND
DAT0
DAT1
CARD DETECT
COM
WRITE PROTECT
GND
Q4
DTA124EUA-X
Q3
DTA124EUA-X
SD PWB ASS'Y

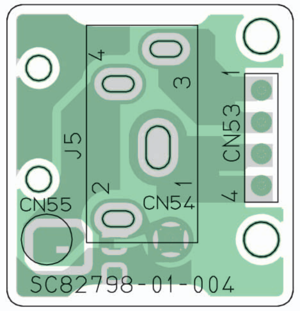
4.21 OPERATION-1 & ETC (MOS, DVOUT, V JK, EAR, DC IN & SD) CIRCUIT DIAGRAMS

– DC IN –

– SIDE A –

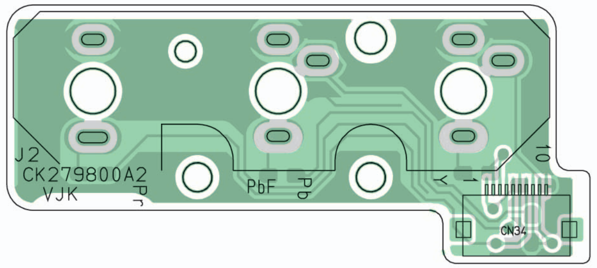

PbF CK279800A1
CN53
CN54
CN55
J5
D1
B
R
DCIN
GND
BATT(+)

– SIDE B –

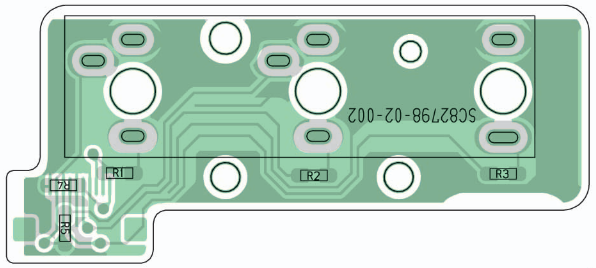

4
3
1
J5
CN53
2
1
4
CN55
CN54
SC82798-01-004

– V JK –

– SIDE A –

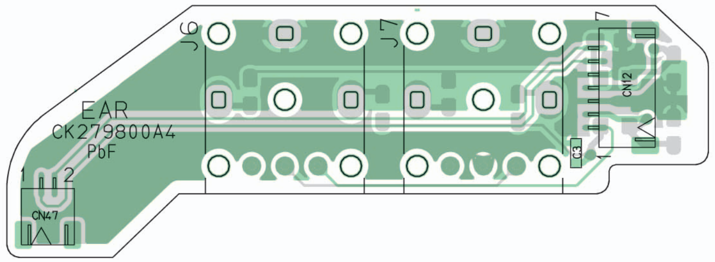

J2
CK279800A2
VJK
PbF
10
CN34

– SIDE B –

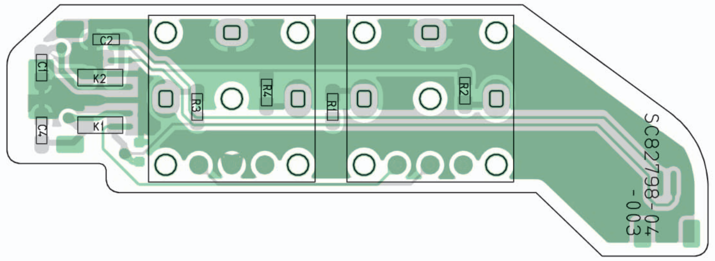

SC82798-02-002
R1
R2
R3
R4
R5

– EAR –

– SIDE A –

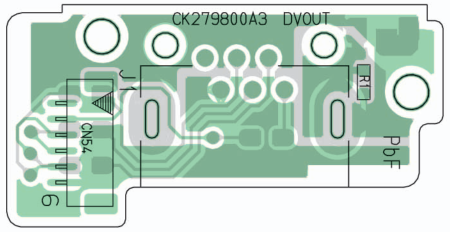

J6
J7
EAR
CK279800A4
PbF
CN12
CN47
1
2

– SIDE B –

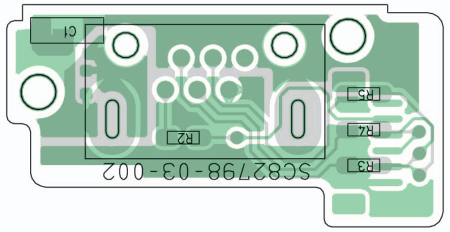

C2
K2
K1
C1
R3
R4
R1
R2
SC82798-04-003

– DV OUT –

– SIDE A –

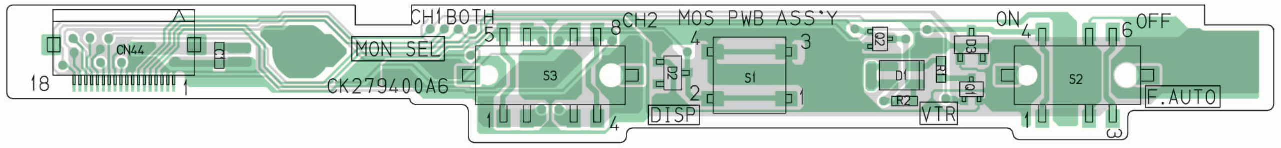

CK279800A3 DVOUT
J1
R1
CN52
PbF
6

– SIDE B –

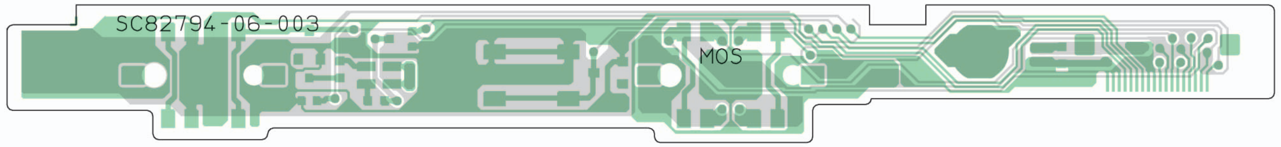

C1
R5
R4
R3
R2
SC82798-03-002

– MOS –

– SIDE A –

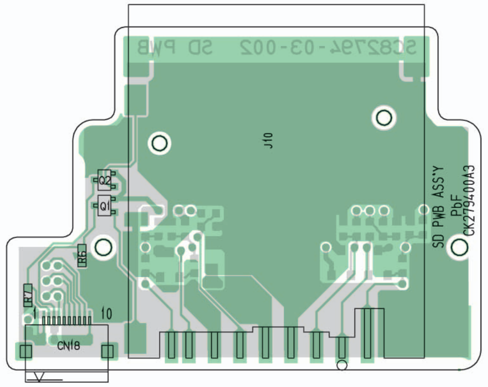

CH1BOTH
CH2
MOS PWB ASS'Y
ON
OFF
MON SEL
CK279400A6
CN44
18
1
S3
S1
S2
DISP
VTR
F.AUTO
D1
R2

– SIDE B –

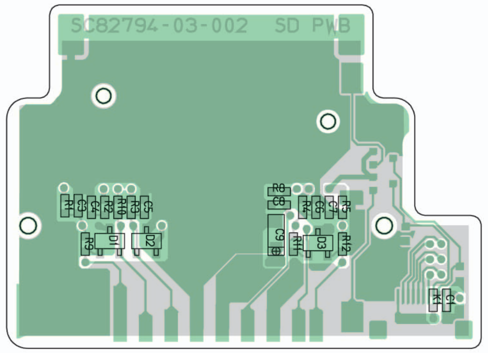

SC82794-06-003
MOS

– SD –

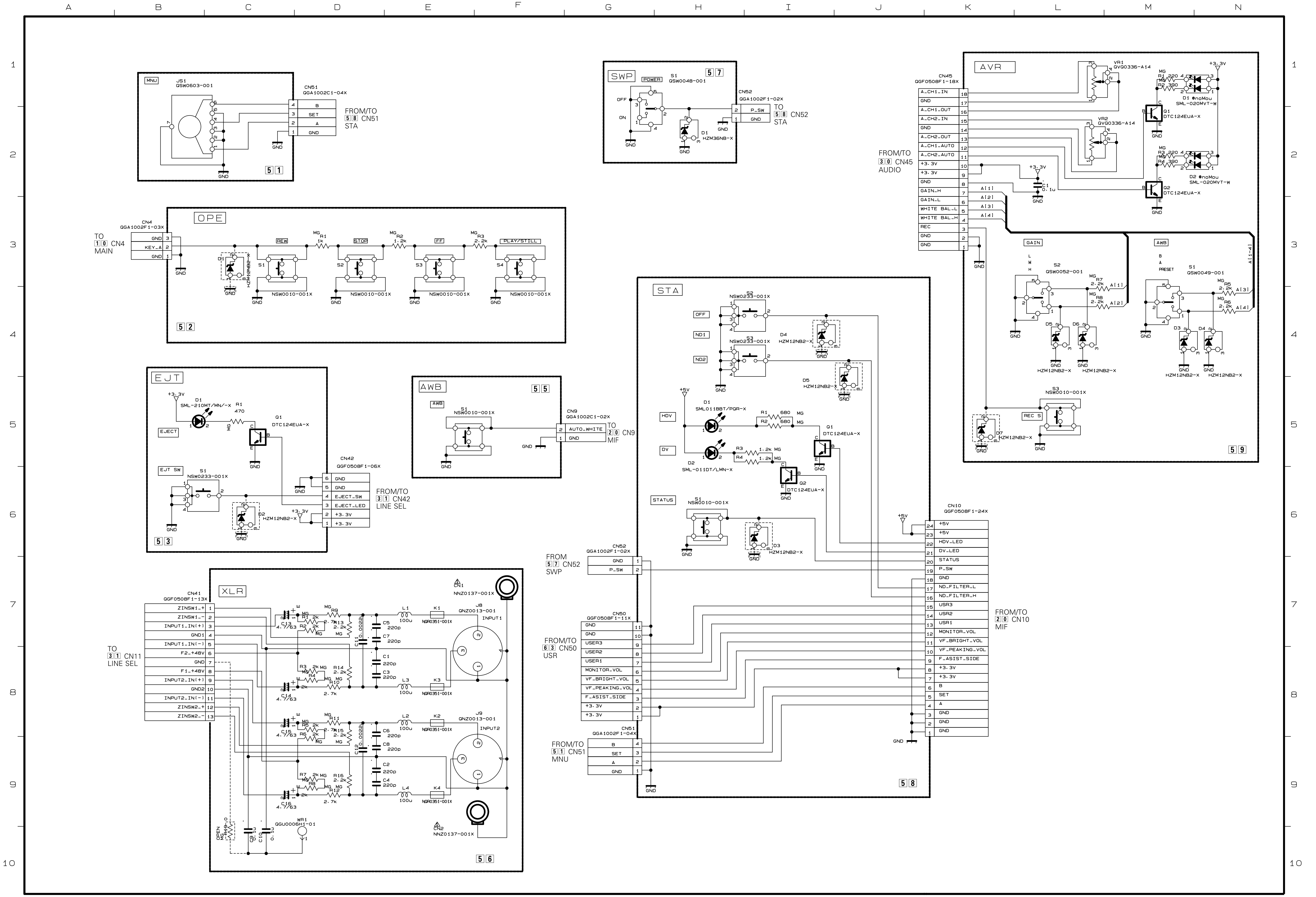
– SIDE A –


SC82794-03-002 SD PWB
J10
SD PWB ASS'Y
PbF
CK279400A3
CN18
10

– SIDE B –


SC82794-03-002 SD PWB

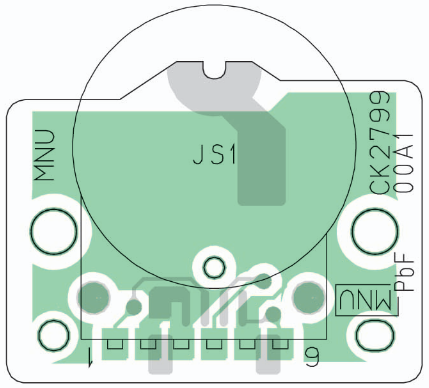
4.22 OPERATION-2 (AVR, STA, SWP, MNU, OPE, EJT, AWB & XLR) SCHEMATIC DIAGRAMS


A
B
C
D
E
F
G
H
I
J
K
L
M
N
1
2
3
4
5
6
7
8
9
10
MNU
JS1
QSW0603-001
CN51
QGA1002C1-04X
B
SET
A
GND
FROM/TO
58 CN51
STA
51
SWP
POWER
S1
QSW0048-001
57
CN52
QGA1002F1-02X
P_SW
GND
TO
58 CN52
STA
OFF
ON
D1
HZM36NB-X
AVR
CN45
QGF0508F1-18X
A_CH1_IN
A_CH1_OUT
A_CH2_IN
A_CH2_OUT
A_CH1_AUTO
A_CH2_AUTO
+3.3V
GAIN_H
GAIN_L
WHITE BAL_L
WHITE BAL_H
REC
FROM/TO
30 CN45
AUDIO
VR1
QVQ0336-A14
VR2
QVQ0336-A14
D1 enoMou
SML-020MVT-W
D2 enoMou
SML-020MVT-W
Q1
DTC124EUA-X
Q2
DTC124EUA-X
C1
0.1u
A[1]
A[2]
A[3]
A[4]
A[1-4]
GAIN
S2
QSW0052-001
AWB
S1
QSW0049-001
PRESET
D5
D6
D3
D4
HZM12NB2-X
S3
NSW0010-001X
REC S
D7
HZM12NB2-X
59
CN4
QGA1002F1-03X
TO
10 CN4
MAIN
KEY_A
OPE
REW
STOP
FF
PLAY/STILL
R1 1k
R2 1.2k
R3 2.2k
D1
HZM12NB2-X
S1
S2
S3
S4
NSW0010-001X
52
STA
S2
NSW0233-001X
S3
NSW0233-001X
OFF
ND1
ND2
D4
HZM12NB2-X
D5
HZM12NB2-X
+5V
D1
SML011BBT/PQR-X
HDV
DV
R1 680
R2 680
R3 1.2k
R4 1.2k
Q1
DTC124EUA-X
Q2
DTC124EUA-X
D2
SML-011DT/LMN-X
STATUS
S1
NSW0010-001X
D3
HZM12NB2-X
EJT
+3.3V
D1
SML-210MT/MN/-X
R1
470
Q1
DTC124EUA-X
EJECT
EJT SW
S1
NSW0233-001X
D2
HZM12NB2-X
CN42
QGF0508F1-06X
EJECT_SW
EJECT_LED
FROM/TO
31 CN42
LINE SEL
53
AWB
S1
NSW0010-001X
55
CN9
QGA1002C1-02X
AUTO_WHITE
TO
20 CN9
MIF
CN10
QGF0508F1-24X
+5V
HDV_LED
DV_LED
STATUS
P_SW
ND_FILTER_L
ND_FILTER_H
USR3
USR2
USR1
MONITOR_VOL
VF_BRIGHT_VOL
VF_PEAKING_VOL
F_ASIST_SIDE
FROM/TO
20 CN10
MIF
CN52
QGA1002F1-02X
FROM
57 CN52
SWP
CN50
QGF0508F1-11X
USER3
USER2
USER1
FROM/TO
63 CN50
USR
CN51
QGA1002F1-04X
FROM/TO
51 CN51
MNU
58
XLR
CN41
QGF0508F1-13X
ZINSW1_+
ZINSW1_-
INPUT1_IN(+)
GND1
INPUT1_IN(-)
F2_+48V
F1_+48V
INPUT2_IN(+)
GND2
INPUT2_IN(-)
ZINSW2_+
ZINSW2_-
TO
31 CN11
LINE SEL
CN1
NNZ0137-001X
J8
QNZ0013-001
INPUT1
J9
QNZ0013-001
INPUT2
CN2
NNZ0137-001X
K1
K2
K3
K4
NQR0351-001X
L1
L2
L3
L4
100u
C5 220p
C7 220p
C1 220p
C3 220p
C6 220p
C8 220p
C2 220p
C4 220p
C11 0.0022
C12 0.0022
C13 4.7/63
C14 4.7/63
C15 4.7/63
C16 4.7/63
2.7k
2.2k
2k
C9 0.1u
C10 0.1u
WR1
QGU0006H1-01
OPEN
56

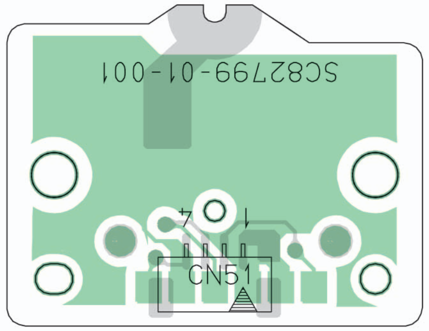
4.23 OPERATION-2 (AVR, STA, SWP, MNU, OPE, EJT, AWB & XLR) CIRCUIT BOARDS

– MNU –

– SIDE A –

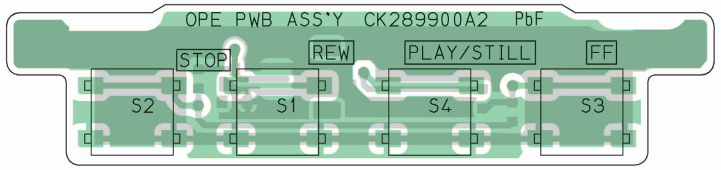

MNU
JS1
CK2799
00A1
PbF
MNU
1
6

– SIDE B –

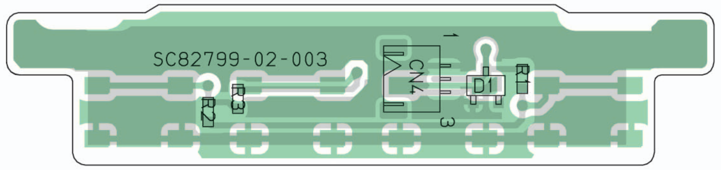

SC82799-01-001
4
1
CN51

– OPE –

– SIDE A –

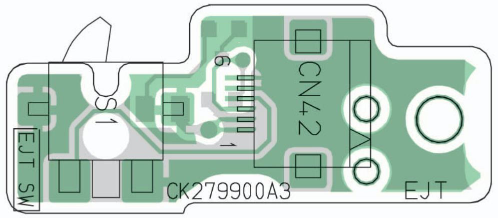

OPE PWB ASS'Y CK289900A2 PbF
STOP
REW
PLAY/STILL
FF
S2
S1
S4
S3

– SIDE B –

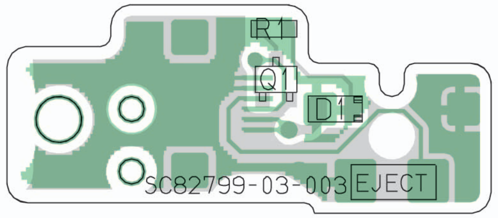

SC82799-02-003
CN4
1
3
D1
R1
R2
R3

– EJT –

– SIDE A –

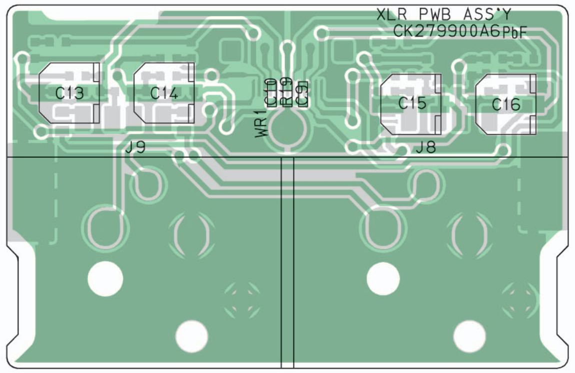

S1
6
1
CN42
EJT SW
CK279900A3
EJT

– SIDE B –

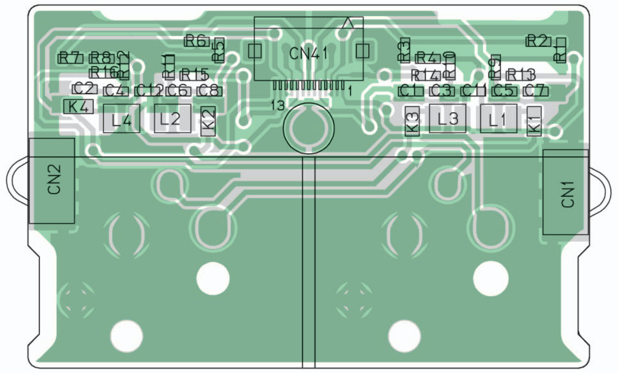

R1
Q1
D1
SC82799-03-003
EJECT

– XLR –

– SIDE A –

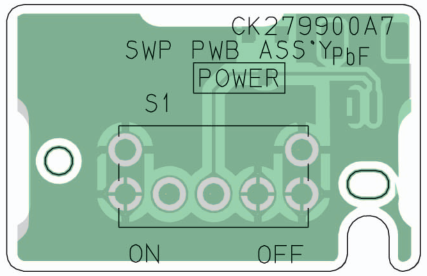

XLR PWB ASS'Y
CK279900A6PbF
C13
C14
C10
C9
C15
C16
VR1
J9
J8

– SIDE B –

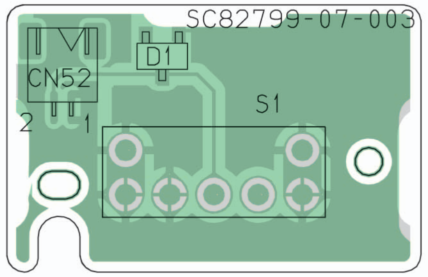

R7 R8 R12
R16
R6
C2 C4 C12 C6 C8
R15
CN41
R3
R4
R14
R13
R2
C1 C3 C11 C5 C7
K4
L4
L2
K2
13
1
K3
L3
L1
K1
CN2
CN1

– SWP –

– SIDE A –

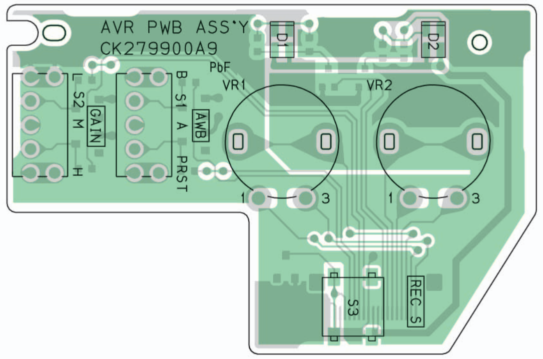

CK279900A7
SWP PWB ASS'Y PbF
POWER
S1
ON
OFF

– SIDE B –

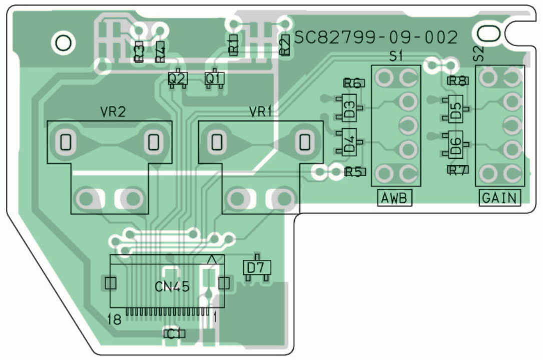

SC82799-07-003
CN52
D1
S1
2
1

– AVR –

– SIDE A –

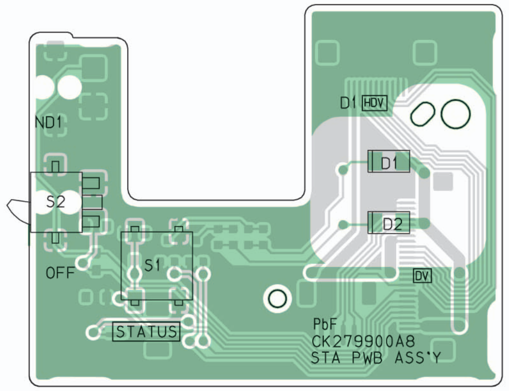

AVR PWB ASS'Y
CK279900A9
PbF
D1
D2
VR1
VR2
S2
GAIN
S1
AWB
PRST
1
3
1
3
S3
REC S

– SIDE B –

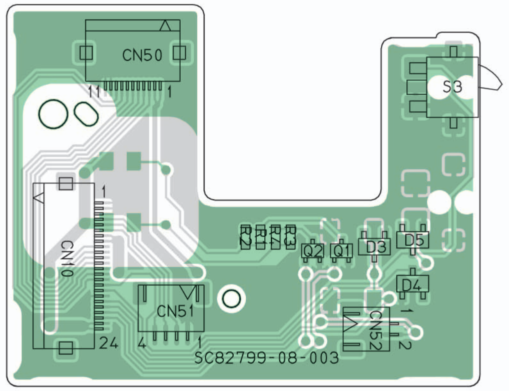

SC82799-09-002
S1
S2
Q2
Q1
VR2
VR1
R6
R8
R5
AWB
GAIN
CN45
D7
18

– STA –

– SIDE A –

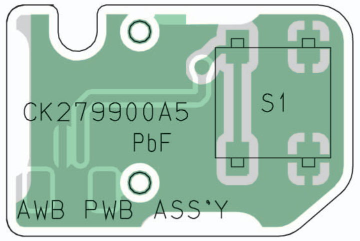

ND1
D1
D1
D2
S2
S1
OFF
STATUS
PbF
CK279900A8
STA PWB ASS'Y

– SIDE B –

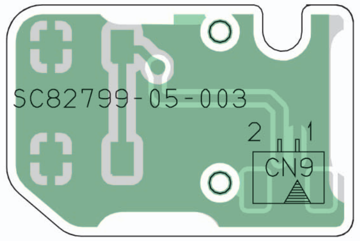

CN50
11
1
S3
CN10
1
24
CN51
4
1
Q2
Q1
D3
D5
D4
CN52
SC82799-08-003

– AWB –

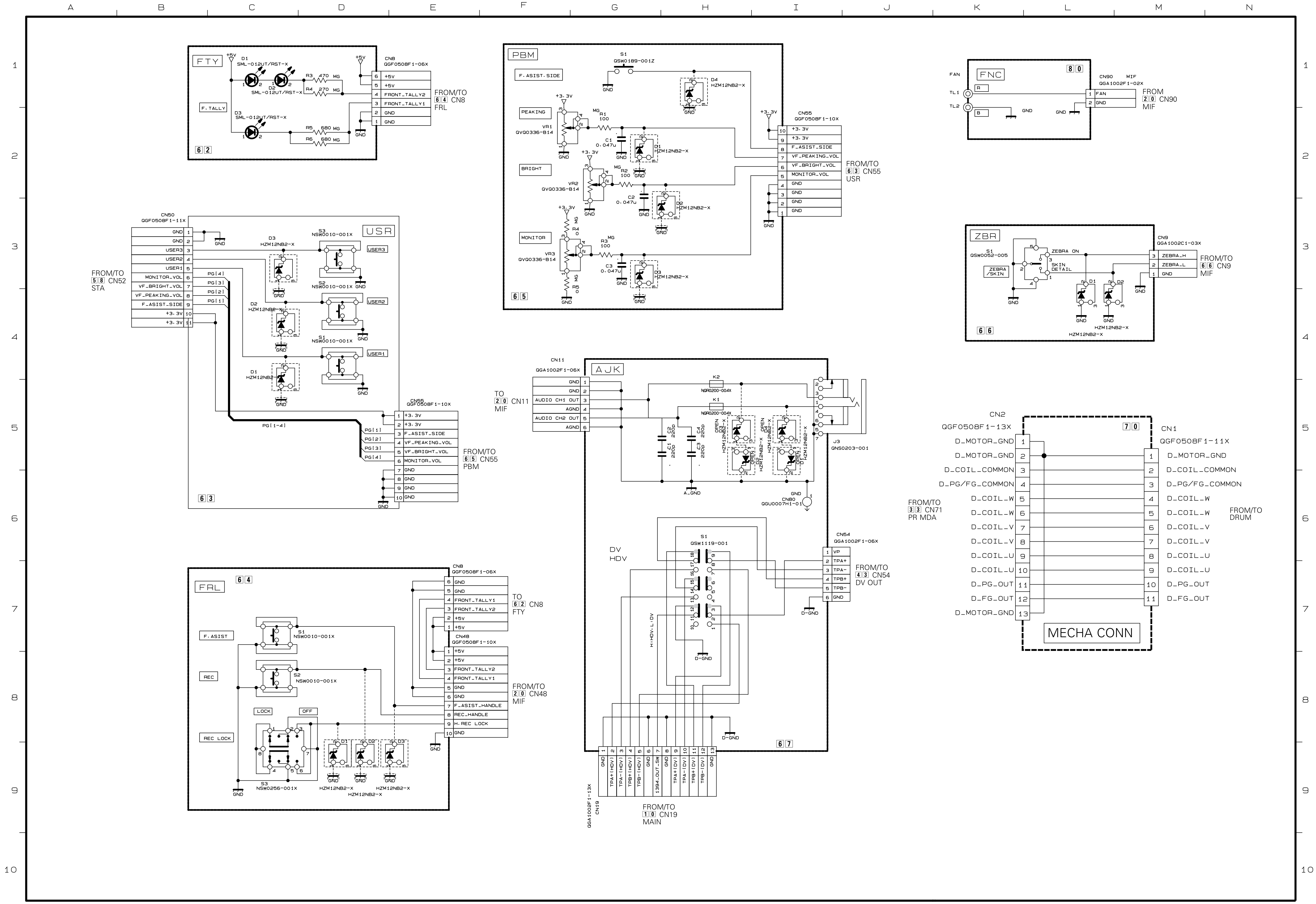
– SIDE A –


CK279900A5
PbF
S1
AWB PWB ASS'Y

– SIDE B –


SC82799-05-003
2
1
CN9

4.24 OPERATION-3 (FTY, USR, FRL, PBM, AJK, FNC & ZBR) & MECHA CONNECTOR SCHEMATIC DIAGRAMS

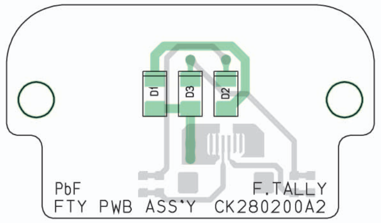


A
B
C
D
E
F
G
H
I
J
K
L
M
N
1
2
3
4
5
6
7
8
9
10
FTY
D1
SML-012UT/RST-X
D2
SML-012UT/RST-X
D3
SML-012UT/RST-X
F.TALLY
R3 470 MG
R4 270 MG
R5 680 MG
R6 680 MG
+5V
CN8
QGF0508F1-06X
+5V
+5V
FRONT_TALLY2
FRONT_TALLY1
GND
GND
FROM/TO
64 CN8
FRL
62
PBM
S1
QSW0189-001Z
F.ASIST.SIDE
D4
HZM12NB2-X
PEAKING
VR1
QVQ0336-B14
R1 100
C1 0.047u
D1
HZM12NB2-X
BRIGHT
VR2
QVQ0336-B14
R2 100
C2 0.047u
D2
HZM12NB2-X
MONITOR
VR3
QVQ0336-B14
R3 100
C3 0.047u
D3
HZM12NB2-X
R4 0
R5 0
+3.3V
CN55
QGF0508F1-10X
+3.3V
+3.3V
F_ASIST_SIDE
VF_PEAKING_VOL
VF_BRIGHT_VOL
MONITOR_VOL
GND
FROM/TO
63 CN55
USR
65
FNC
80
FAN
TL1
TL2
R
B
GND
CN90 MIF
QGA1002F1-02X
FAN
GND
FROM
20 CN90
MIF
ZBR
S1
QSW0052-005
ZEBRA /SKIN
ZEBRA ON
SKIN DETAIL
D1
D2
HZM12NB2-X
CN9
QGA1002C1-03X
ZEBRA_H
ZEBRA_L
GND
FROM/TO
66 CN9
MIF
66
CN50
QGF0508F1-11X
GND
GND
USER3
USER2
USER1
MONITOR_VOL
VF_BRIGHT_VOL
VF_PEAKING_VOL
F_ASIST_SIDE
+3.3V
+3.3V
FROM/TO
58 CN52
STA
USR
D3
HZM12NB2-X
S3
NSW0010-001X
USER3
S2
NSW0010-001X
USER2
D2
HZM12NB2-X
S1
NSW0010-001X
USER1
D1
HZM12NB2-X
PG[4]
PG[3]
PG[2]
PG[1]
PG[1-4]
CN55
QGF0508F1-10X
+3.3V
+3.3V
F_ASIST_SIDE
VF_PEAKING_VOL
VF_BRIGHT_VOL
MONITOR_VOL
GND
FROM/TO
65 CN55
PBM
63
CN11
QGA1002F1-06X
GND
GND
AUDIO CH1 OUT
AGND
AUDIO CH2 OUT
AGND
TO
20 CN11
MIF
AJK
K2
NQR0200-004X
K1
NQR0200-004X
C2 220p
C4 220p
C1 220p
C3 220p
OPEN
D2 HZM12NB2-X
D3 HZM12NB2-X
D1
D4
A_GND
J3
QNS0203-001
CN80
GGU0007H1-01
GND
DV
HDV
S1
QSW1119-001
H:HDV, L:DV
D-GND
CN54
QGA1002F1-06X
VP
TPA+
TPA-
TPB+
TPB-
GND
FROM/TO
43 CN54
DV OUT
67
GND
TPA+(HDV)
TPA-(HDV)
TPB+(HDV)
TPB-(HDV)
GND
1394_OUT_SW
GND
TPA+(DV)
TPA-(DV)
TPB+(DV)
TPB-(DV)
GND
QGA1002F1-13X
CN19
FROM/TO
10 CN19
MAIN
FRL
64
CN8
QGF0508F1-06X
GND
GND
FRONT_TALLY1
FRONT_TALLY2
+5V
+5V
TO
62 CN8
FTY
F.ASIST
S1
NSW0010-001X
REC
S2
NSW0010-001X
LOCK
OFF
REC LOCK
S3
NSW0256-001X
D1
D2
D3
HZM12NB2-X
HZM12NB2-X
HZM12NB2-X
CN48
QGF0508F1-10X
+5V
+5V
FRONT_TALLY2
FRONT_TALLY1
GND
GND
F_ASIST_HANDLE
REC_HANDLE
H.REC LOCK
GND
FROM/TO
20 CN48
MIF
CN2
QGF0508F1-13X
D_MOTOR_GND
D_MOTOR_GND
D_COIL_COMMON
D_PG/FG_COMMON
D_COIL_W
D_COIL_W
D_COIL_V
D_COIL_V
D_COIL_U
D_COIL_U
D_PG_OUT
D_FG_OUT
D_MOTOR_GND
FROM/TO
33 CN71
PR MDA
70
CN1
QGF0508F1-11X
D_MOTOR_GND
D_COIL_COMMON
D_PG/FG_COMMON
D_COIL_W
D_COIL_W
D_COIL_V
D_COIL_V
D_COIL_U
D_COIL_U
D_PG_OUT
D_FG_OUT
FROM/TO
DRUM
MECHA CONN

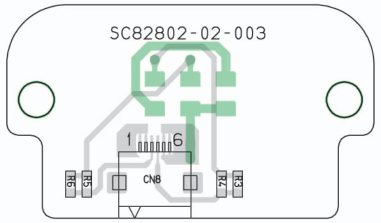
4.25 OPERATION-3 (FTY, USR, FRL, PBM, AJK, FNC & ZBR) & MECHA CONNECTOR CIRCUIT BOARDS

— FTY —

— SIDE A —

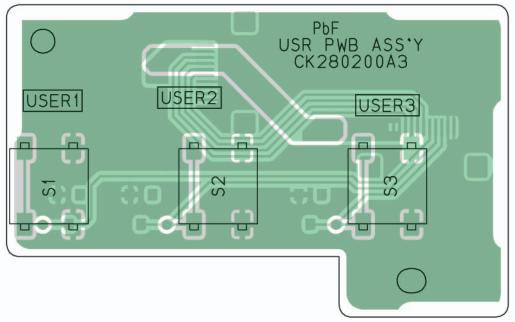

D1
D3
D2
PbF
F.TALLY
FTY PWB ASS'Y CK280200A2

— SIDE B —

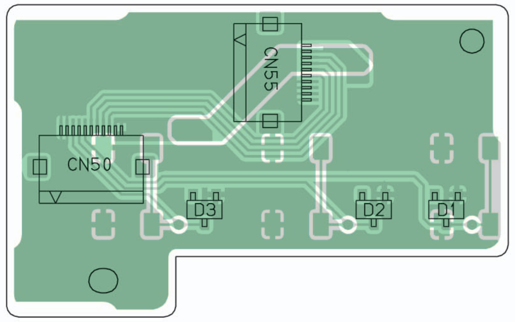

SC82802-02-003
1
6
CN8

— USR —

— SIDE A —

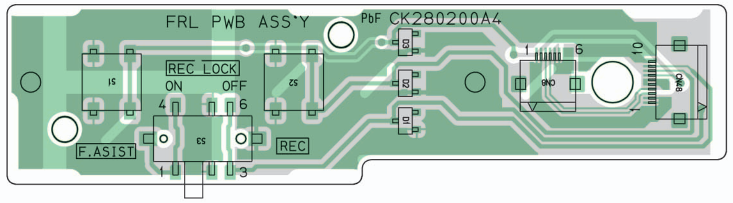

PbF
USR PWB ASS'Y
CK280200A3
USER1
USER2
USER3
S1
S2
S3

— SIDE B —

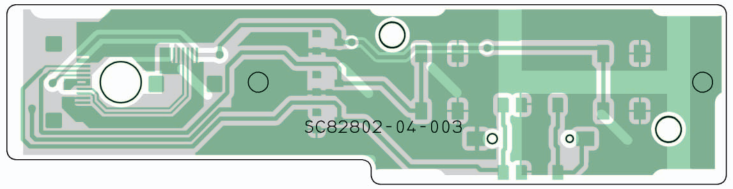

CN55
CN50
D3
D2
D1

— FRL —

— SIDE A —

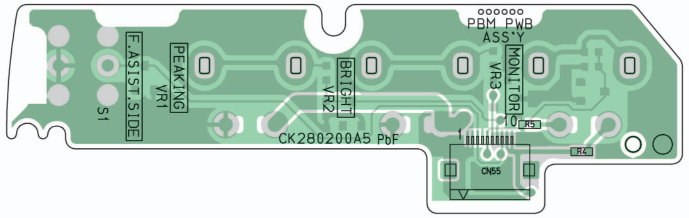

FRL PWB ASS'Y
PbF CK280200A4
REC LOCK
ON
OFF
S1
S2
S3
F.ASIST
REC
4
6
1
3
10

— SIDE B —

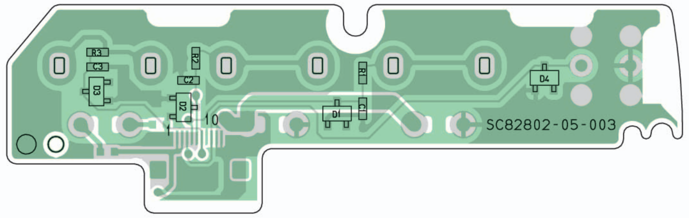

SC82802-04-003

— PBM —

— SIDE A —

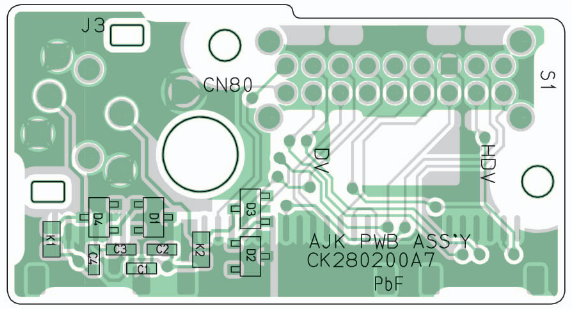

PBM PWB
ASS'Y
S1
F.ASIST.SIDE
PEAKING
VR1
VR2
BRIGHT
VR3
MONITOR
CK280200A5 PbF
CN65
1
10

— SIDE B —

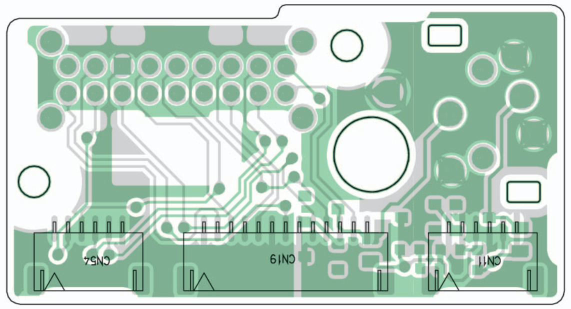

10
SC82802-05-003

— AJK —

— SIDE A —

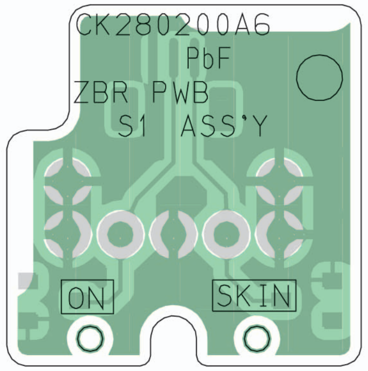

J3
CN80
S1
DV
HDV
AJK PWB ASS'Y
CK280200A7
PbF

— SIDE B —

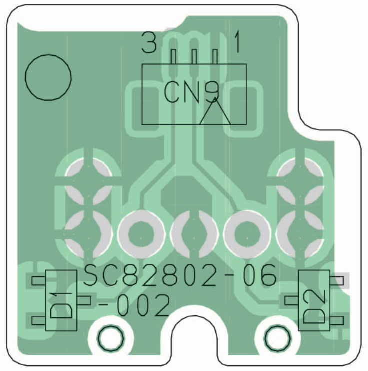


— ZBR —

— SIDE A —

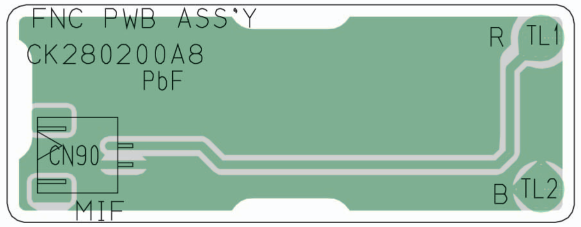

CK280200A6
PbF
ZBR PWB
S1 ASS'Y
ON
SKIN

— SIDE B —


3
1
CN9
SC82802-06
-002
D1
D2

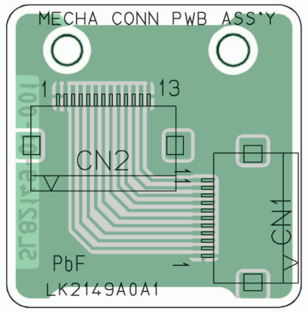
— FNC —

— SIDE A —

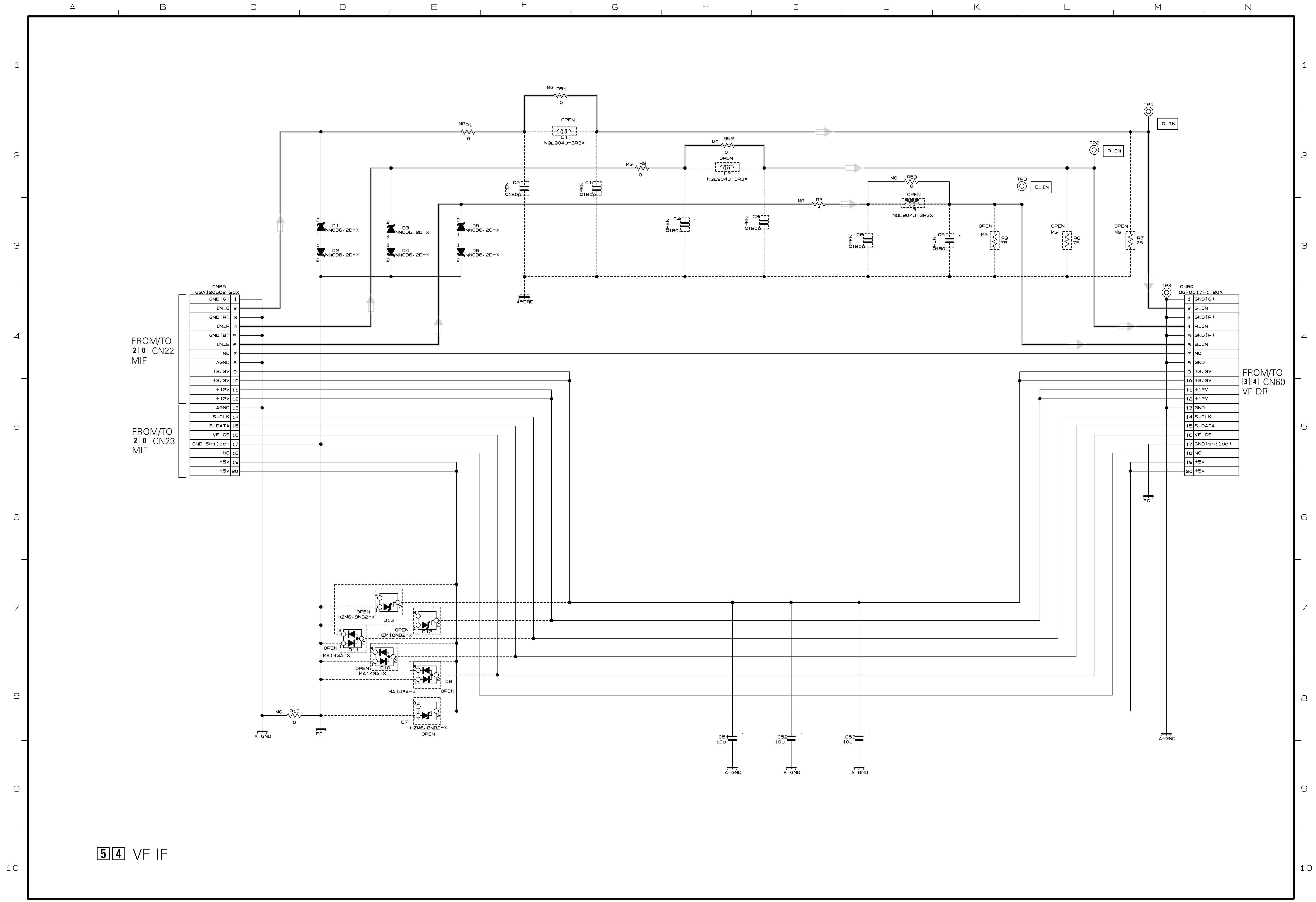

FNC PWB ASS'Y
CK280200A8
PbF
R
TL1
CN90
B
TL2
MIF

— MECHA CONN —

— SIDE A —


MECHA CONN PWB ASS'Y
1
13
CN2
CN1
PbF
LK2149A0A1

4.26 VF IF SCHEMATIC DIAGRAM

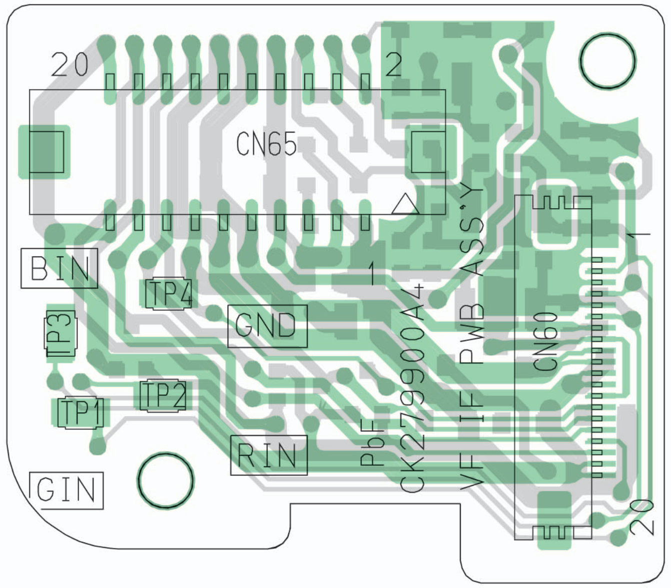


A
B
C
D
E
F
G
H
I
J
K
L
M
N
1
2
3
4
5
6
7
8
9
10
MG R51 0
MG R1 0
OPEN L1 NQL904J-3R3X
MG R52 0
MG R2 0
OPEN L2 NQL904J-3R3X
MG R53 0
MG R3 0
OPEN L3 NQL904J-3R3X
C2 OPEN 0180p
C1 OPEN 0180p
C4 OPEN 0180p
C3 OPEN 0180p
C6 OPEN 0180p
C5 OPEN 0180p
OPEN MG R9 75
OPEN MG R8 75
OPEN MG R7 75
TP1 G_IN
TP2 R_IN
TP3 B_IN
TP4
D1 NNCD6.2D-X
D2 NNCD6.2D-X
D3 NNCD6.2D-X
D4 NNCD6.2D-X
D5 NNCD6.2D-X
D6 NNCD6.2D-X
A-GND
CN65 QGA1206C2-20X
GND(G) 1
IN_G 2
GND(R) 3
IN_R 4
GND(B) 5
IN_B 6
NC 7
AGND 8
+3.3V 9
+3.3V 10
+12V 11
+12V 12
AGND 13
S_CLK 14
S_DATA 15
VF_CS 16
GND(Shilde) 17
NC 18
+5V 19
+5V 20
FROM/TO 2 0 CN22 MIF
FROM/TO 2 0 CN23 MIF
CN60 QGF0517F1-20X
1 GND(G)
2 G_IN
3 GND(R)
4 R_IN
5 GND(R)
6 B_IN
7 NC
8 GND
9 +3.3V
10 +3.3V
11 +12V
12 +12V
13 GND
14 S_CLK
15 S_DATA
16 VF_CS
17 GND(shilde)
18 NC
19 +5V
20 +5V
FROM/TO 3 4 CN60 VF DR
FG
OPEN HZM6.8NB2-X D13
OPEN HZM18NB2-X D12
OPEN MA143A-X D11
OPEN MA143A-X D10
MA143A-X D9 OPEN
D7 HZM6.8NB2-X OPEN
MG R10 0
FG
A-GND
C51 10u
C52 10u
C53 10u
A-GND
A-GND
A-GND
A-GND
5 4 VF IF

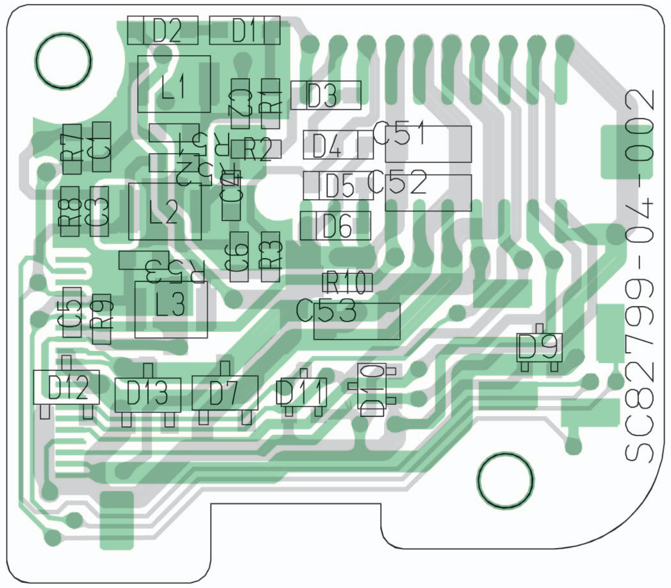
4.27 VF IF & VF DR CIRCUIT BOARDS

– VF IF –

– SIDE A –

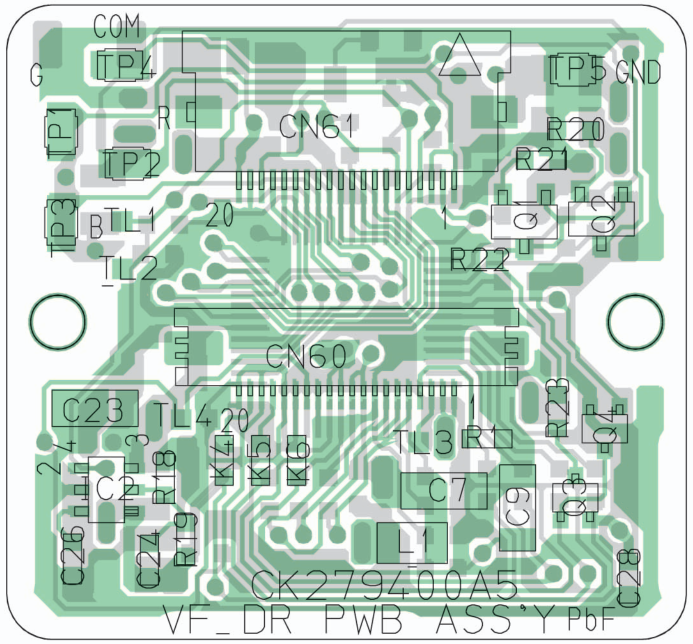

20
2
CN65
BIN
TP4
GND
TP3
TP2
TP1
RIN
GIN
CN60
PbF
CK279900A4
VF IF PWB ASS'Y
1
20

– SIDE B –

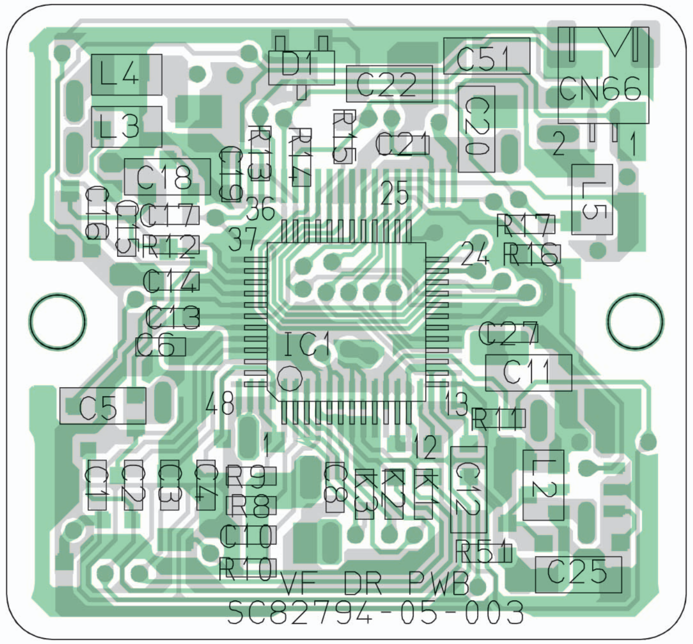

D2
D1
L1
C2
R1
D3
R7
C1
R2
D4
C51
D5
C52
R8
C3
L2
C4
D6
C6
R3
R10
C5
R9
L3
C53
D9
D12
D13
D7
D11
D10
SC82799-04-002

– VF DR –

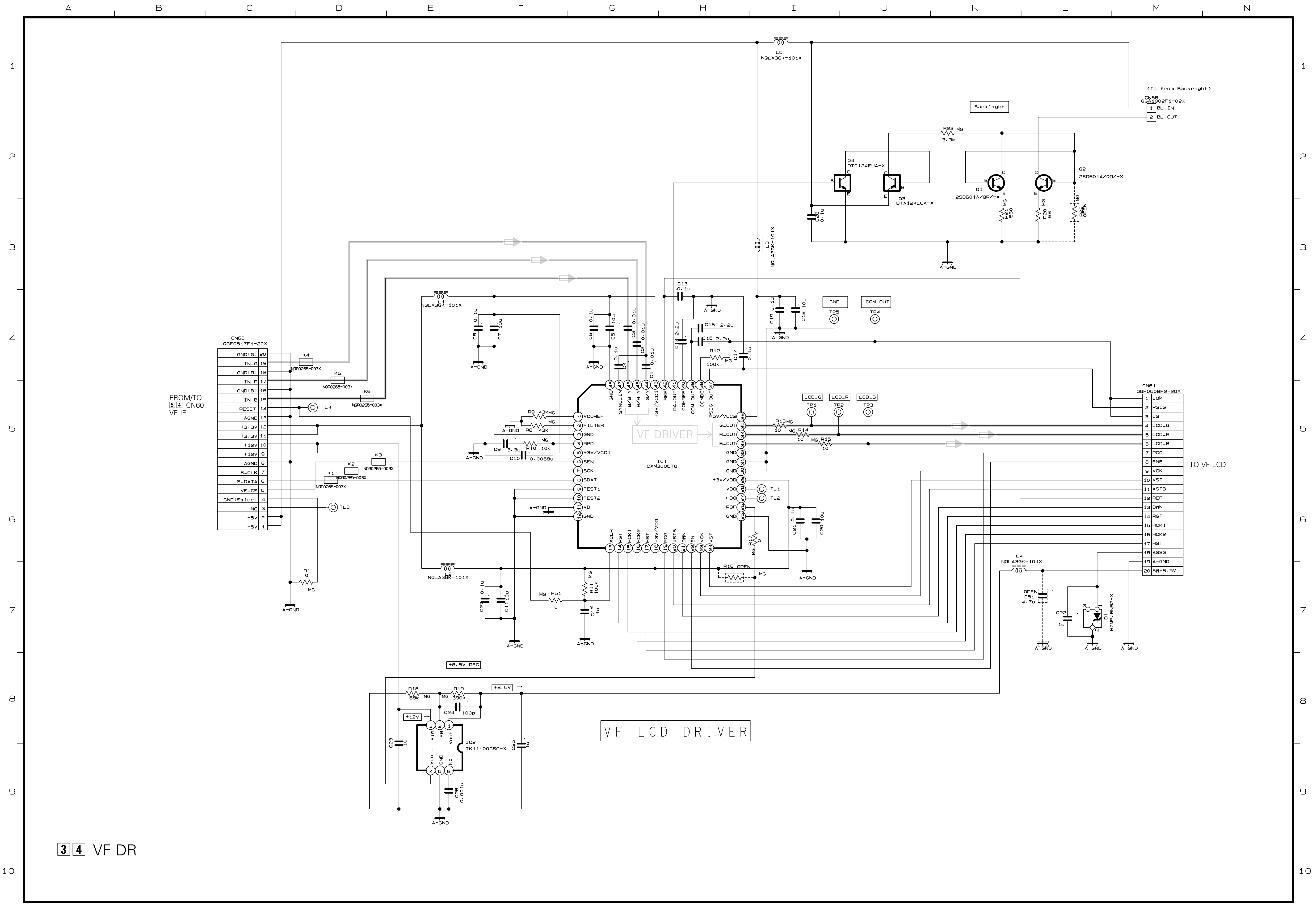
– SIDE A –


COM
TP4
G
TP5
GND
TP1
R
CN61
R20
R21
TP2
TP3
B
TL1
20
1
Q1
Q2
TL2
R22
CN60
C23
TL4
20
R23
Q4
24
3
K4
K5
K6
TL3
R1
C2
R18
C7
C9
Q3
C26
C24
R19
L1
C28
CK279400A5
VF_DR PWB ASS'Y PbF

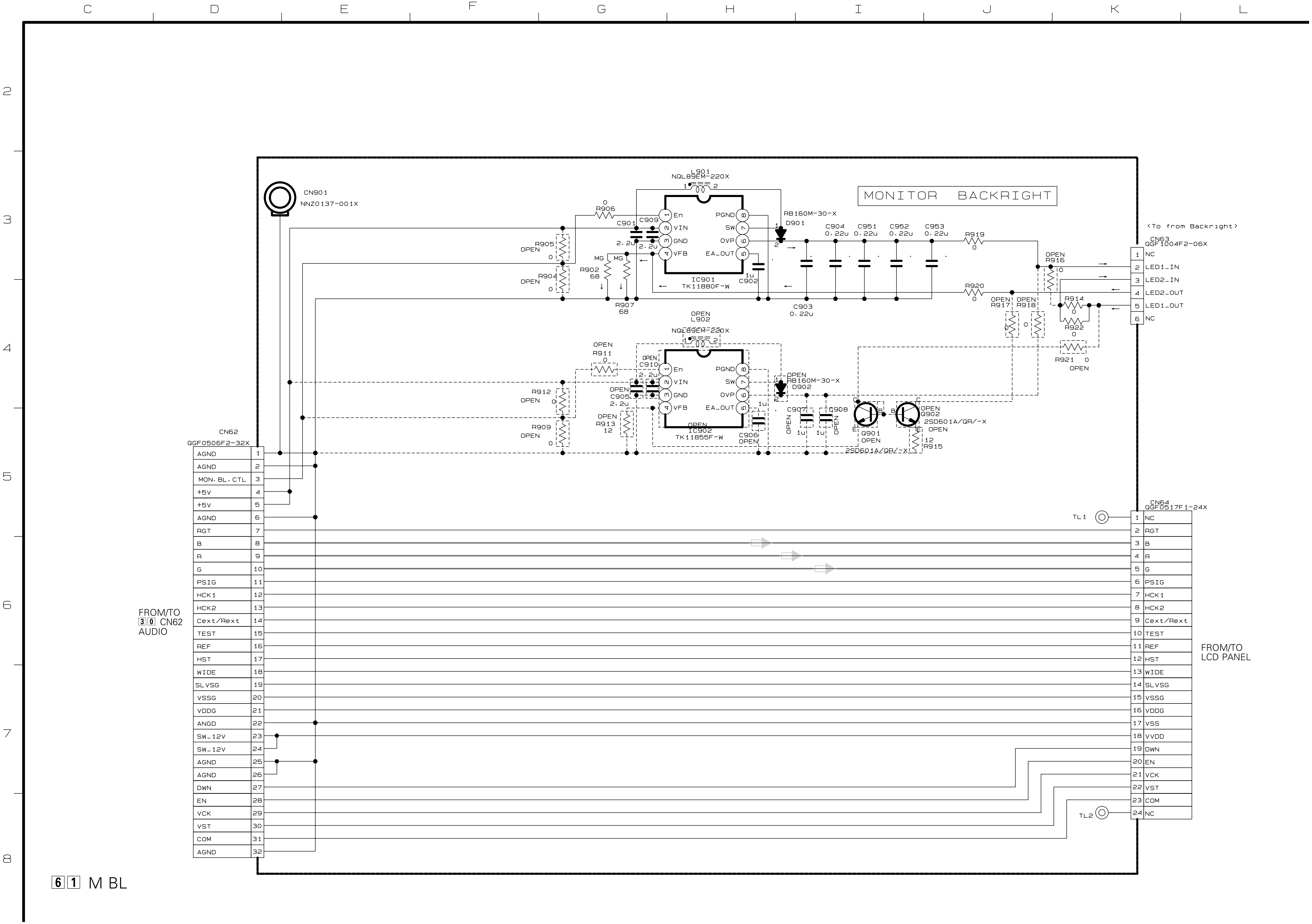
– SIDE B –


L4
D1
C51
C22
CN66
L3
R13
R14
R15
C20
2
1
C21
C18
C19
C16
C17
36
25
L5
R12
37
R17
C14
24
R16
C13
IC1
C27
C6
C11
C5
48
13
R11
1
12
C1
C2
C3
C4
R9
R8
C8
R3
R2
R4
C12
L2
C10
R10
R5
C25
VF DR PWB
SC82794-05-003

4.28 VF DR SCHEMATIC DIAGRAM

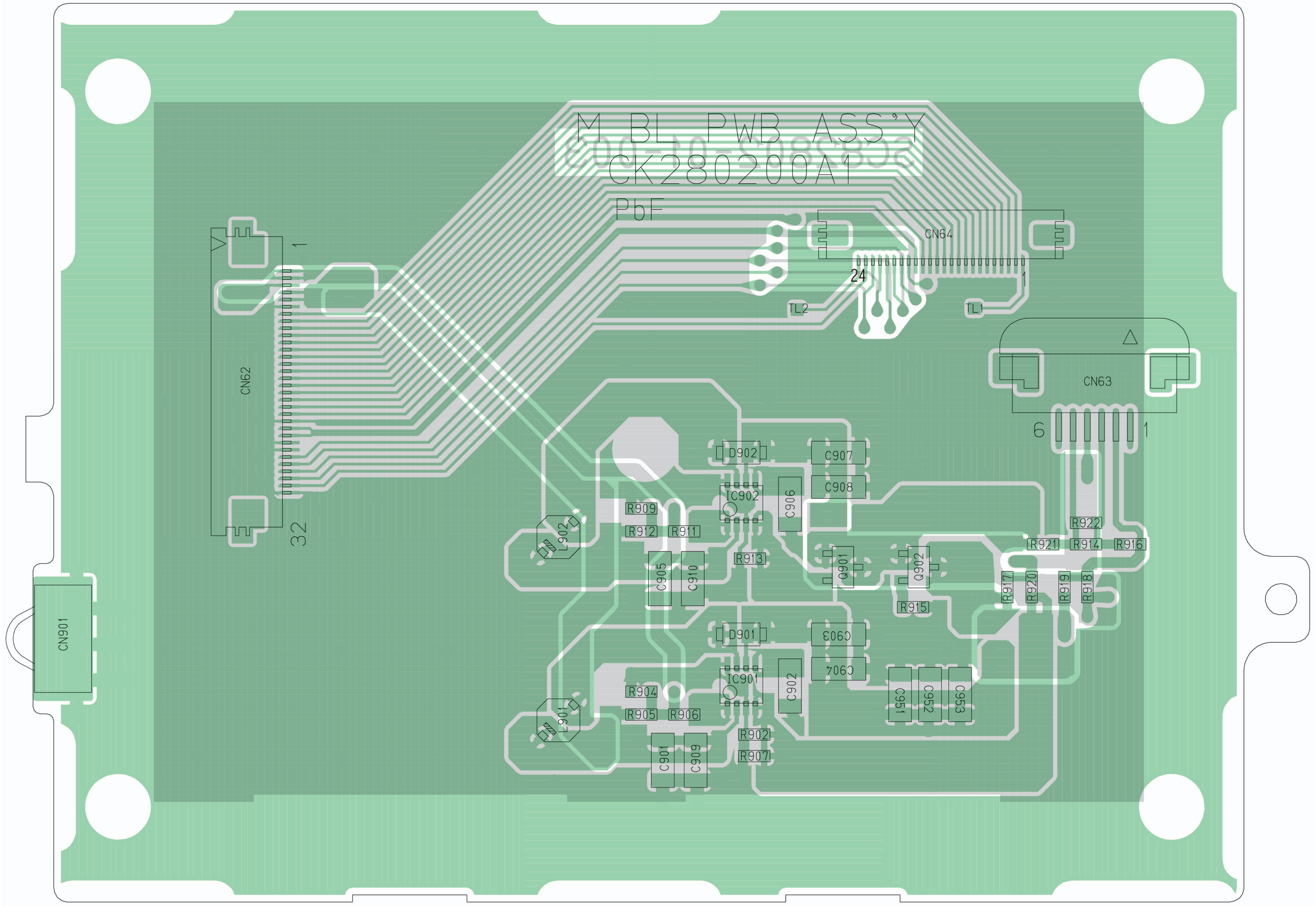

A
B
C
D
E
F
G
H
I
J
K
L
M
N
1
2
3
4
5
6
7
8
9
10
VF DR SCHEMATIC DIAGRAM
3 4 VF DR
VF LCD DRIVER
VF DRIVER
FROM/TO
5 4 CN60
VF IF
CN60
QGF0517F1-20X
GND(G) 20
IN_G 19
GND(R) 18
IN_R 17
GND(B) 16
IN_B 15
RESET 14
AGND 13
+3.3V 12
+3.3V 11
+12V 10
+12V 9
AGND 8
S_CLK 7
S_DATA 6
VF_CS 5
GND(Slide) 4
NC 3
+5V 2
+5V 1
K1
K2
K3
K4
K5
K6
NQR0265-003X
TL1
TL2
TL3
TL4
R1
0
MG
L1
L2
L3
L4
L5
NQLA3GK-101X
IC1
CXM3005TQ
VCOREF
FILTER
GND
RPD
+3V/VCC1
SEN
SCK
SDAT
TEST1
TEST2
VD
SYNC_IN
B/B-Y
R/R-Y
G/Y
+3V/VCC1
REF
DA_OUT
COMREF
COM_OUT
COMDC
SIG_OUT
5V/VCC2
G_OUT
R_OUT
B_OUT
+3V/VDD
VDD
HDD
POF
XCLR
RGT
HCK1
HCK2
HST
PCG
XSTB
DWN
EN
VCK
VST
C1 0.01u
C2 0.01u
C3 0.01u
C4 0.1u
C5 10u
C6 0.1u
C7 10u
C8 0.1u
C9 3.3u
C10 0.0068u
C11 10u
C12 1u
C13 0.1u
C14 2.2u
C15 2.2u
C16 2.2u
C17 0.1u
C18 10u
C19 0.1u
C20 10u
C21 0.1u
C22 1u
C23 1u
C24 100p
C25 1u
C26 0.001u
C27 0.1u
C28 0.1u
C51 OPEN 4.7u
R8 43k
R9 43k MG
R10 10k MG
R11 100k MG
R12 100k MG
R13 10 MG
R14 10 MG
R15 10 MG
R16 OPEN MG
R17 0 MG
R18 68k MG
R19 390k MG
R20 68 MG
R21 560 MG
R22 OPEN MG
R23 3.3k MG
R51 0 MG
A-GND
GND
TP5
COM OUT
TP4
LCD_G
TP1
LCD_R
TP2
LCD_B
TP3
Backlight
<To from Backright>
CN66
GGA1002F1-02X
1 BL IN
2 BL OUT
Q1 2SD601A/QR/-X
Q2 2SD601A/QR/-X
Q3 DTA124EUA-X
Q4 DTC124EUA-X
CN61
QGF0508F2-20X
1 COM
2 PSIG
3 CS
4 LCD_G
5 LCD_R
6 LCD_B
7 PCG
8 ENB
9 VCK
10 VST
11 XSTB
12 REF
13 DWN
14 RGT
15 HCK1
16 HCK2
17 HST
18 ASSG
19 A-GND
20 SW+8.5V
TO VF LCD
D1
HZM5.6NB2-X
+8.5V REG
+8.5V
+12V
IC2
TK11100CSC-X
Vin
FB
Vout
Vcont
GND
Nb

4.29 M BL SCHEMATIC DIAGRAM


C
D
E
F
G
H
I
J
K
L
2
3
4
5
6
7
8
MONITOR BACKRIGHT
CN901
NNZ0137-001X
L901
NQL89EM-220X
R906
0
C901
C909
2.2u
2.2u
R905
OPEN
0
R904
OPEN
0
MG
MG
R902
68
R907
68
IC901
TK11880F-W
En
VIN
GND
VFB
PGND
SW
OVP
EA_OUT
1u
C902
RB160M-30-X
D901
C904
0.22u
C951
0.22u
C952
0.22u
C953
0.22u
C903
0.22u
R919
0
R920
0
OPEN
R916
0
OPEN
R917
OPEN
R918
R914
0
R922
0
R921 0
OPEN
<To from Backright>
CN63
QGF1004F2-06X
1 NC
2 LED1_IN
3 LED2_IN
4 LED2_OUT
5 LED1_OUT
6 NC
OPEN
L902
NQL89EM-220X
OPEN
R911
0
OPEN
C910
2.2u
OPEN
C905
2.2u
R912
OPEN
0
R909
OPEN
0
OPEN
R913
12
OPEN
IC902
TK11855F-W
C906
OPEN
1u
OPEN
RB160M-30-X
D902
C907
OPEN
1u
C908
OPEN
1u
Q901
OPEN
2SD601A/QR/-X
OPEN
Q902
2SD601A/QR/-X
OPEN
12
R915
CN62
QGF0506F2-32X
1 AGND
2 AGND
3 MON.BL.CTL
4 +5V
5 +5V
6 AGND
7 RGT
8 B
9 R
10 G
11 PSIG
12 HCK1
13 HCK2
14 Cext/Rext
15 TEST
16 REF
17 HST
18 WIDE
19 SLVSG
20 VSSG
21 VDDG
22 ANGD
23 SW_12V
24 SW_12V
25 AGND
26 AGND
27 DWN
28 EN
29 VCK
30 VST
31 COM
32 AGND
FROM/TO
30 CN62
AUDIO
TL1
TL2
CN64
QGF0517F1-24X
1 NC
2 RGT
3 B
4 R
5 G
6 PSIG
7 HCK1
8 HCK2
9 Cext/Rext
10 TEST
11 REF
12 HST
13 WIDE
14 SLVSG
15 VSSG
16 VDDG
17 VSS
18 VVDD
19 DWN
20 EN
21 VCK
22 VST
23 COM
24 NC
FROM/TO
LCD PANEL
61 M BL

4.30 M BL CIRCUIT BOARD

– SIDE A –


M BL PWB ASS'Y
CK280200A1
PbF
CN64
24
1
TL2
TL1
CN63
6
1
CN62
1
32
CN901
D902
C907
C908
IC902
C906
R909
R912
R911
R913
L902
C905
C910
Q901
Q902
R922
R921
R914
R916
R917
R920
R919
R918
R915
D901
C903
C904
IC901
C902
R904
R905
R906
R902
R907
C951
C952
C953
L901
C901
C909